



April 16, 2013

Mr. Joseph Kelly  
Corrective Action Project Manager  
Corrective Action Section 1  
Remediation and Reuse Branch  
Land and Chemicals Division  
U.S. Environmental Protection Agency – Region 5  
77 West Jackson Street  
Mail Code LU-9J  
Chicago, Illinois 60604-3590

**RE: Transmittal of Cleanup Completion Report for the Former ACF Facility,  
East St. Louis, Illinois**

Dear: Mr. Kelly:

AMEC is submitting this Cleanup Completion Report as requested in the October 13, 2011 approval letter. AMEC followed the Self-Implementation Cleanup and Disposal Plan submitted to the EPA September 12, 2011 for the tasks related to the remediation of polychlorinated biphenyl (PCB) over 50 ppm for the subject site.

This report transmits the data collected during the site remediation and responds to your conditions in the approval letter. The cleanup complies with the applicable CFR regulations.

This response letter is divided into three parts:

1. A letter, signed by any potential purchaser on maintenance of a cap or fence for the remediated area as part of site maintenance;
2. A response to the September 12, 2011 EPA comments; and
3. A Completion Report.

**1- Letter on Future Site Maintenance**

EPA requested that ACF notify them of any prospective purchaser.

ACF is not currently planning to the sell the property or transfer it to a new owner. If conditions change the new owner will be advised that a remediation occurred. As required by 40 CFR 761.61(a)(8)(i)(A) ACF has filed a deed restriction for the site with St. Clair County, Illinois. A copy of the deed restriction is provided as Attachment 1.

AMEC  
15933 Clayton Road, Suite 215  
Ballwin, MO 63011  
Tel 636.200.5116  
Fax 636.386.3804

## **2- Responses to Comments to Meet Regulatory Requirements of CFR 761.61(a)**

**Site characterization** – AMEC agrees with the comment that the “Self-Implementation PCB cleanup” is limited to only the remediated area described in the Cleanup Completion Report. The location of the center of the cleanup is 38.620361 latitude and - 90.174592 longitude.

The additional 19.9 acres of the site are not considered part of the corrective action completion report.

**Notification and certification**- 30 days prior to the work, notifications were completed and approvals obtained from the St. Clair County office and City of East St. Louis. Documentation is available upon request.

**Cleanup levels, low occupancy areas** – All soil samples results were less than 10 ppm for PCBs. Documented clean backfill was placed within and over the excavation areas. The remediated area has been effectively capped with clean soil and demarcation is visibly noticeable since the backfill is a white limestone fines material. A cap is not required for sites less than 10 ppm; however, as part of site backfilling a cap was created so an open excavation does not remain at the site. The site is already fenced and a sign has been placed at the gated entrance.

**Change in land use** – There is no planned change in land-use. The site will remain vacant. Based on the sample results of less than 10 ppm and future land-use can be low-occupancy.

**Liquids , if encountered in excavation** - The excavation did not encounter any groundwater or precipitation events during site remediation and backfilling, therefore no water removal or disposal was required.

**Cleanup wastes** - No wastes were generated except sample gloves as part of the remediation, which were added to the soil removed from the site.

**Cleanup verification, sampling and analysis** - Soil sampling followed the 761 subpart O protocols. Composited soil samples were made by wall or excavation floor area from 9 aliquots per sample. Aliquots were taken every 1.5 meter or less to create the composite as shown on sketches in the completion report.

**Cap requirements** – A cap is not required for sites less than 10 ppm; however, as part of site backfilling a cap was created so an open excavation does not remain at the site.

**Deed restrictions and certification** – As requested a deed restriction for the remediated area and the additional 19.9 acres of the site will be completed. The remediated area was limited to a surface area of approximately 20 by 27 feet. Previously completed investigations for other parts of the site indicates the full site boundaries will

need a deed restriction since data indicates concentrations above 1 ppm but less than 25 ppm.

The area currently is fenced with a locked gate. A sign has been placed on the site entrance.

### **3- Cleanup Completion Report for Remediated Area**

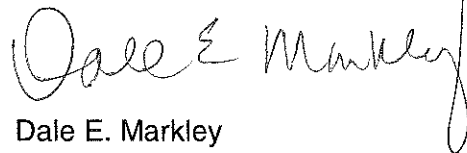
The completion report is provided as Attachment 2.

#### **Closing**

AMEC appreciates your review of this transmittal of response and the completion report. Should you have any questions regarding this transmittal, please contact Dale Markley at 636.200.5116 or by email at dale.markley@amec.com.

Sincerely,

**AMEC Environment & Infrastructure, Inc.**



Dale E. Markley  
Senior Associate Hydrogeologist

pc: Rich Hyink, ACF Director of Safety & Environment

#### **Attachments:**

1. Deed Restriction
2. Cleanup Completion Report

**ATTACHMENT 1**

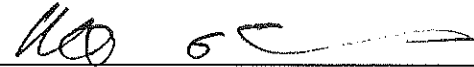
**Deed Restriction**



### CERTIFICATION OF NOTATION RECORDING

In accordance with the certification requirements of 40 C.F.R. § 761.61(a)(8)(i)(B), the undersigned hereby certifies that ACF Industries LLC has recorded a notation on the deed to the property located at 100 Trendley Avenue, East St. Louis, Illinois (the "Property"). The notation, required by 40 C.F.R. § 761.61(a)(8)(i)(A), is entitled "Declaration of Land Use Restrictive Covenant" and identifies PCB remediation waste remaining on the Property and designates the Property as a low occupancy area in accordance with applicable federal regulations. A copy of the Declaration of Land Use Restrictive Covenant is attached hereto.

**ACF Industries LLC**

By: 

Name: Mark A. Crinnion

Date: April 1, 2013

Title: Vice President – Treasurer



\* A 0 2 3 5 9 4 5 9 7 \*

**A02359459**

MICHAEL T. COSTELLO  
RECORDER OF DEEDS  
ST. CLAIR COUNTY  
BELLEVILLE, IL

03/19/2013 02:20:26PM

RHSP FEE: 10.00

TOTAL FEE: \$33.00

PAGES: 7

**Return to:**

Daniel Wofsey  
Armstrong Teasdale LLP  
7700 Forsyth Boulevard, Suite 1800  
St. Louis, MO 63105

**Prepared by:**

Lee Sharp  
Brown Rudnick LLP  
185 Asylum Street  
Hartford, CT 06103

33.00

**DECLARATION OF LAND USE RESTRICTIVE COVENANT  
(ENVIRONMENTAL RESTRICTION)**

**THIS DECLARATION OF LAND USE RESTRICTIVE COVENANT,**  
("Declaration") is made as of the 15<sup>th</sup> day of March, 2013 by **ACF Industries LLC**, a  
Delaware limited liability company, having an office and principal place of business at 101 Clark  
Street, St. Charles, Missouri, 63301 ("Owner").

**WITNESSETH:**

**WHEREAS**, Owner is the fee simple owner of the 19.9-acre property located at 100  
Trendley Avenue in the city of East St. Louis, St. Clair County, Illinois (the "Property"), which  
Property is more particularly described in Exhibit A attached hereto. The Property has been  
vacant since 1980 and contains no above-grade structures; and

**WHEREAS**, Owner identified concentrations of polychlorinated biphenyls ("PCBs") in  
soils on the Property and, by letter dated September 12, 2011, submitted to the Environmental  
Protection Agency ("EPA") a Self-Implementing Cleanup and Disposal Plan (the "Plan")  
pursuant to 40 C.F.R. § 761.61; and

**WHEREAS**, by letter dated October 13, 2011, EPA approved the Plan with conditions.  
Pursuant to the Plan, Owner conducted soil removal and soil sampling in accordance with 40  
C.F.R. § 761.61 and will submit a cleanup completion report to EPA describing the remediation;  
and

**WHEREAS**, PCB-impacted soil is a bulk PCB remediation waste under federal regulations. The cleanup level for bulk PCB remediation waste in areas designated as low occupancy areas is twenty-five (25) parts per million ("ppm"). Soil with concentrations of PCBs greater than one (1) ppm and less than twenty-five (25) ppm remain on the Property as shown on the survey map attached as Exhibit B; and

**WHEREAS**, low occupancy use for bulk PCB remediation waste means that direct human exposure for any individual not wearing dermal and respiratory protection is restricted, in a calendar year, to less than 335 hours (an average of 6.7 hours per week) ("Low Occupancy Use"); and

**WHEREAS**, if a property is designated as a Low Occupancy Use area for purposes of remediation, the Owner must record a notation on the deed to the Property that will in perpetuity notify any potential purchaser of the remaining bulk PCB remediation waste and the Low Occupancy Use area designation.

**NOW THEREFORE**, in order to comply with the EPA's requirements and to protect the present and future public health and safety, Owner acknowledges the following and consents to the following restrictions contained in this Declaration:

1. The Property contains bulk PCB remediation waste and is restricted to Low Occupancy Use, as defined herein, or hereinafter defined in 40 C.F.R. § 761.3.
2. Soils with PCB concentrations between one (1) ppm and twenty-five (25) ppm remain on the Property as shown on the survey map attached as Exhibit B.
3. The restrictions and other requirements described in this Declaration shall run with the land and be binding upon and inure to the benefit of the Owner and Owner's successors, assignees, heirs and lessees and their authorized agents, employees, contractors, representatives, agents, lessees, licensees, invitees, guests, or persons acting under their direction or control (hereinafter "Related Parties") and shall continue as a servitude running in perpetuity with the Property. No transfer, mortgage, lease, license, easement, or other conveyance of any interest in or right to occupancy in all or any part of the Property by any person shall affect the restrictions set forth herein. This Declaration is imposed upon the entire Property. As permitted by 40 C.F.R. §761.61(a)(8)(ii), this Declaration, any restrictions contained herein, and any notice of this Declaration on the deed may be removed no earlier than thirty (30) days after achieving the applicable cleanup levels specified in 40 C.F.R. § 761.61.
4. By taking title to an interest in or occupancy of the Property, any subsequent owner or Related Party agrees to comply with all of the restrictions set forth in this Declaration.
5. Any instrument conveying any interest in any portion of the Property, including but not limited to deeds, leases and subleases (excluding mortgages, liens, similar financing interests, and other non-possessory encumbrances), shall include the following notice provision (with blanks to be filled in):

**NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO A LAND  
USE RESTRICTIVE COVENANT, DATED \_\_\_\_\_ 2013, RECORDED IN  
THE OFFICE OF THE RECORDER OF ST. CLAIR COUNTY ON  
\_\_\_\_\_, 2013, INSTRUMENT NUMBER (or other identifying  
reference) \_\_\_\_\_.**

6. The undersigned person executing this Declaration represents that he or she is the authorized representative of the Owner, and further represents and certifies that he or she is duly authorized and fully empowered to execute and record, or have recorded, this Declaration.

IN WITNESS WHEREOF, the Owner hereto has executed this Declaration as of the day and year first written above.

ACF Industries LLC

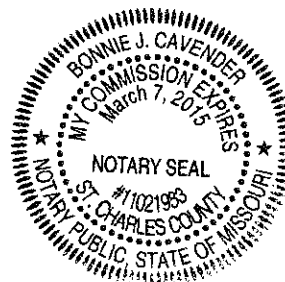
By Mark A. Crippin  
Name: Mark A. Crippin  
Title: Vice President-Treasurer

STATE OF Missouri:  
COUNTY OF St. Charles:  
SS.

On this the 15<sup>th</sup> day of March 2013, before me, Mark A. Crumpton, personally appeared, who acknowledged himself to be the Vice President-Treasurer of ACF Industries LLC, and, being authorized so to do, executed the foregoing instrument for the purposes therein contained as a free act and deed.

Sonnie J. Cavender

Notary Public/ My Commission Expires: March 7, 2015



## **EXHIBIT A**

### **PROPERTY DESCRIPTION OF 100 TRENDLEY AVENUE, EAST ST. LOUIS**

Designated in the St. Clair County Recorder's Office as Parcel Number 01-14.0-300-007 and Lots 1A, 1B and 3, Blocks 10, 11, and 30.

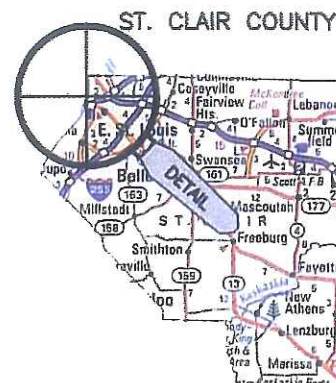
Part of "DIVISION OF VACANT FERRY LANDS, EAST ST. LOUIS, ILLS" reference being had to the plat thereof recorded in the Recorder's Office of St. Clair County, Illinois, in Book of Plats "B" on pages 28 and 29, more particularly described as follows, to-wit:

Beginning at the intersection of the East line of Front Street with the South line of Trendley Avenue; thence South 89 degrees 29 minutes East from said beginning point along the South line of Trendley Avenue, a distance of 960.49 feet; thence East continuing along the South line of Trendley Avenue, a distance of 161.80 feet to an intersection with a curve; thence Southerly along a curve to the right having radius of 1,424.41 feet, a distance of 766.73 feet; thence South 16 degrees 10 minutes West, a distance of 163.64 feet to an intersection with a curve; thence Westerly along a curve to the left having a radius of 500.75 feet, a distance of 74.58 feet to a point of tangent; thence North 65 degrees 43 minutes West, a distance of 46.64 feet to a point of curve; thence Westerly along a curve to the left having a radius of 852.22 feet, a distance of 257.07 feet to a point of tangent; thence North 83 degrees 00 minutes West, a distance of 318.48 feet to a point of curve, thence Westerly along a curve to the right having a radius of 647.36 feet, a distance of 126.64 feet to a point of tangent; thence North 71 degrees 47 minutes 30 seconds West, a distance of 364.16 feet to a point of curve; thence Westerly along a curve to the right having a radius of 1,354.28 feet, a distance of 76.42 feet to a point of compound curve; thence Westerly and Northerly along a curve to the right having a radius of 355.89 feet, a distance of 301.30 feet to a point of tangent; thence North 20 degrees 03 minutes West, a distance of 65.91 feet to a point on the East line of Front Street; thence North 0 degrees 34 minutes East along said line, a distance of 290.12 feet to the point of beginning, together with all buildings, railroad tracks and appurtenances thereto and other improvements situated thereon.

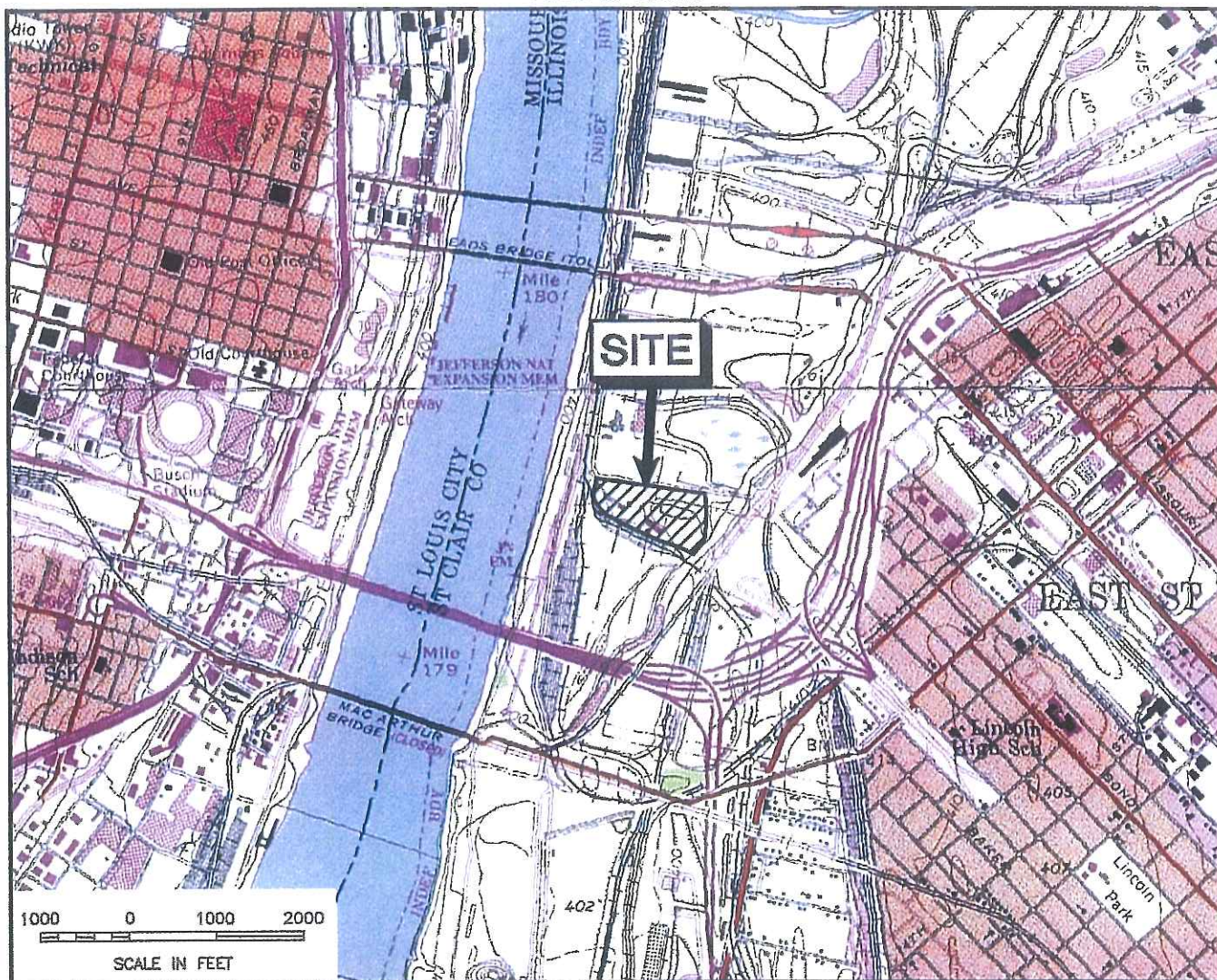
**EXHIBIT B**  
**SURVEY MAP SHOWING PCB CONCENTRATIONS**

60749352 v2-023743/0005





AREA IN DETAIL



Modified from U.S. Geological Survey, Cahokia & Granite City, Illinois quadrangle, Photorevised 1993.

SCALE IS VARIABLE



TITLE:  
SITE LOCATION MAP

DWN:

TMM

DES.:

DEM

CHKD:

APPD:

DATE:

12/6/10

REV.:

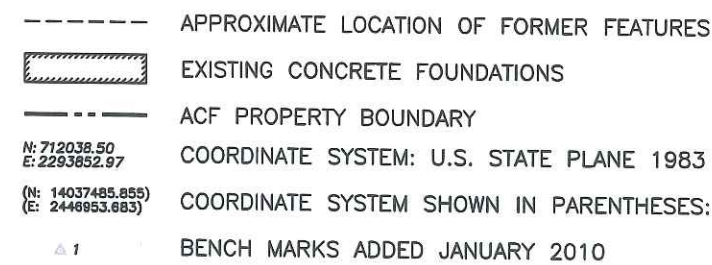
0

PROJECT NO.: 3250115533.02

ACF-EAST ST. LOUIS  
EAST ST. LOUIS, ILLINOIS

FIGURE 1





NOTE: Drawing modified from original survey performed by SMS Engineers: project #464593 dated November 1991 with coordinates supplied by Heneghan & Associates in January 2010.

A horizontal number line with arrows at both ends. It has tick marks at 0, 70, and 140. The word "FEET" is written below the line.

**TITLE:**  
SITE PROPERTY BOUNDARIES

DWN:	CGS
CHKD:	
DATE:	01/04/12

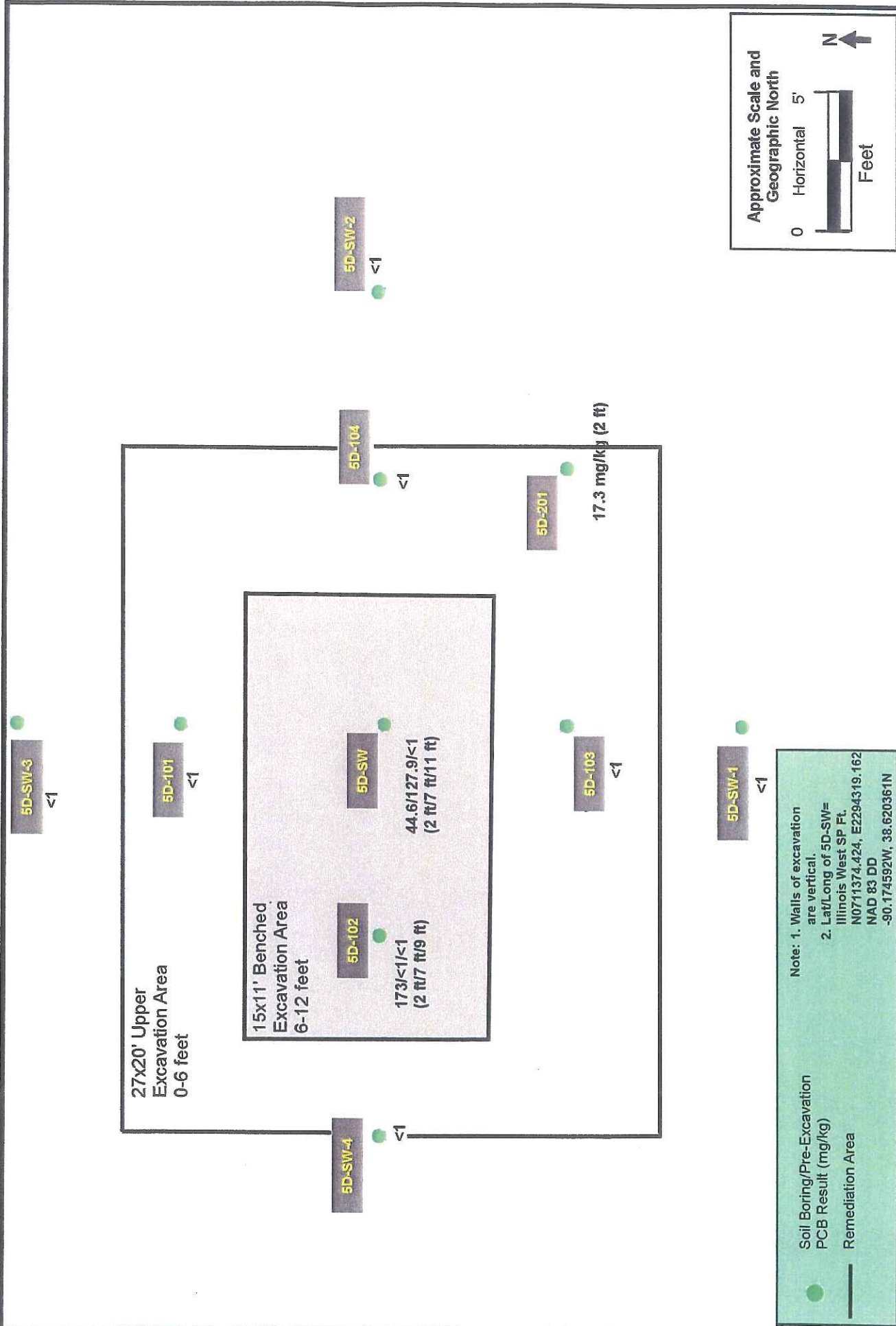
DES:	DEM
APPD:	
REV:	0

PROJECT NO: 3250115533.02  
ACF-EAST ST. LOUIS  
EAST ST. LOUIS, ILLINOIS

FIGURE 2

**WK\_ST#DWG\_FILE\_PATH\_NAME**







**November 15, 2011 Remediation Area**

DWG: JLG	FORM: DEM	ACF East St. Louis, IL	<b>FIGURE 3</b>
	Project Number: 3250115533.02		
DATE: 1/04/2012	REV: 0		

**ATTACHMENT 2**

**Cleanup Completion Report**

**CLEANUP COMPLETION REPORT**  
**Self-Implementation PCB Remediation**  
**Former ACF Industries Site**  
**100 Trendley Avenue**  
**East St. Louis, Illinois**

Prepared for:  
**ACF Industries LLC**  
**St. Charles, Missouri**

Prepared by:  
**AMEC Environment & Infrastructure, Inc.**  
**St. Louis, Missouri**



**January 4, 2012**

**AMEC Project Number 3250115533**

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### List of Abbreviations and Acronyms

AMEC	AMEC Environment & Infrastructure
bgs	below ground surface
IEPA	Illinois Environmental Protection Agency
PCB	polychlorinated biphenyl
ppm	parts per million
SRP	Site Remediation Program
USEPA	U.S. Environmental Protection Agency



## **1.0 INTRODUCTION AND SITE BACKGROUND**

AMEC Environment & Infrastructure (AMEC) has prepared this Cleanup Completion Report as requested in the USEPA approval letter dated October 13, 2011 (Appendix A). AMEC followed the Self-Implementation Cleanup and Disposal Plan submitted to the USEPA on September 12, 2011 for the tasks related to the remediation of polychlorinated biphenyl (PCB) over 50 parts per million (ppm) for the subject site. The former ACF site was previously entered into the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) as state identification number ILD006273809, but has since been removed from the program.

This report includes the data collected during the site remediation and responds to conditions in the approval letter.

The location of the site and remediation area is shown on Figures 1 through 3. Sampling centered on the two samples that exceeded 50 ppm for PCBs (5D/SW and 5D-102). The remediated area is a small part of the full 19.9 acres of the property owned by ACF at this site.

## **2.0 REMEDIATION DOCUMENTATION**

AMEC directed the soil removal and backfilling activities on November 15 and 17, 2011. The proposed boundaries of the excavation were based on the previous sampling that was provided in the application to USEPA.

The area of the proposed excavation was expanded and benched to remove visible cinder fill where the highest levels of PCBs were detected. The black cinder fill is present to a depth of approximately 6 feet below ground surface (bgs). It is a mixture of soil, cinders and brick fragments. The excavation boundaries for the upper fill material were 27 by 20 feet.

The excavation site photographs (Appendix B) illustrate a transition to the apparent natural fine sand unit at approximately 6 feet bgs. At 6 feet bgs, the excavation was benched to a smaller area with dimensions of 15 by 11 feet. The maximum depth of excavation was 12 feet.

Field notes (Appendix C) illustrate the excavation dimensions and sample locations.

On November 15, 2011, a total of 171 tons of PCB impacted soil was excavated and manifested (Appendix D) to the Heritage landfill permitted for PCB disposal located in Roachdale, Indiana.

## **2.1 SOIL SAMPLING PROTOCOL**

Soil samples were collected as required by Subpart O of 761.280-298. The excavated area was divided into sub-areas with the dimensions illustrated on site field notes in Appendix C. A typical wall sub-area was 10 feet by 6 feet and a total of nine soil sample aliquots were taken from this area on approximately 5-foot spacing through out the sub-area. The nine samples from each sub-area were composited in a metal pan on-site to create one composite sample per sub-area. Samples were labeled to correspond to location. Samples were retrieved by either reaching over the excavation sidewall or from the excavator bucket. Photoionization detector readings of sample headspace in ppm were made during all site excavations, and the results were all zero ppm. A total of 24 samples were collected with 24-hour turnaround time requested from the lab.

The samples collected for testing were placed in the appropriate containers and documented on the chain-of-custody records.

## **2.2 SOIL SAMPLING RESULTS**

The sample results are provided in Appendix E, and the detected results are summarized on Table 1. The PCB Aroclors 1254 and 1260 were the only detected Aroclors. The sample with the highest detected sum of Aroclors was 7.17 ppm. Nine of the 24 samples were below the detection limit of 0.044 ppm.

AMEC did a Quality Assurance/Quality Control evaluation of the sample results, and the results were considered acceptable as discussed in the project memorandum provided in Appendix E.

## **3.0 BACKFILL OF EXCAVATION**

AMEC directed the soil backfilling activities on November 17, 2011. Backfill material was trucked in from the nearby Fallings Spring Quarry Company (2901 Stolle Road, Dupon, Illinois.) The material was limestone quarry fines, and was tested for PCBs, semi-volatile organic compounds, volatile organic compounds, and metals prior to use. The backfill was considered acceptable (Appendix F).



## Tables

Table 1

## PCB Soil Sample Results for ACF Former Railcar Facility

## Excavation Bottom and Sidewalls

## East St. Louis, Illinois

## Samples Collected November 15, 2011

	AMEC Sample ID	Lab Id	Analyte	Result ug/kg
East Wall	E I Wall	11110662-003	Aroclor 1254	222
	E I Wall	11110662-003	Aroclor 1260	229
	E/N Wall 1	11110662-016	Aroclor 1254	1,810
	E/N Wall 1	11110662-016	Aroclor 1260	2,040
	E/S Wall 1	11110662-015	Aroclor 1254	873
	E/S Wall 1	11110662-015	Aroclor 1260	1,080
West Wall	W/N Wall 1	11110662-014	Aroclor 1254	3,580
	W/N Wall 1	11110662-014	Aroclor 1260	3,590
	W/S Wall 1	11110662-013	Aroclor 1254	3,460
	W/S Wall 1	11110662-013	Aroclor 1260	2,080
North Wall	NC-Wall 1	11110662-019	Aroclor 1254	82
	NC-Wall 1	11110662-019	Aroclor 1260	97
	NE Wall 1	11110662-020	Aroclor 1254	494
	NE Wall 1	11110662-020	Aroclor 1260	635
	NE I W - East	11110662-004	Aroclor 1254	63
	NE I W - East	11110662-004	Aroclor 1260	68
	NW I W - West	11110662-005	Aroclor 1254	851
	NW I W - West	11110662-005	Aroclor 1260	458
	NW Wall 1	11110662-021	Aroclor 1254	220
	NW Wall 1	11110662-021	Aroclor 1260	388
South Wall	SC Wall 1	11110662-022	Aroclor 1254	1,840
	SC Wall 1	11110662-022	Aroclor 1260	3,940
	SE Wall 1	11110662-024	Aroclor 1254	2,220
	SE Wall 1	11110662-024	Aroclor 1260	1,740
	SW Wall 1	11110662-023	Aroclor 1254	533
	SW Wall 1	11110662-023	Aroclor 1260	505
Bottom	NW BOT 1	11110662-017	Aroclor 1254	158
	NW BOT 1	11110662-017	Aroclor 1260	162
	SE BOT-1	11110662-009	Aroclor 1254	120
	SE BOT-1	11110662-009	Aroclor 1260	117

Only Aroclor 1254 and 1260 detected in any sample

Detection Level was 45.4 ug/kg or lower

All analyzed samples were from 9 aliquots' per area to make 1 composite

These samples were below detection limits:

SW I wall	NC-BOT-1	SC-BOT-1	IBE-1	SE I Wall
SW-BOT-1	NE-BOT-1	IBW-1	W I Wall	SW I Wall

## Figures

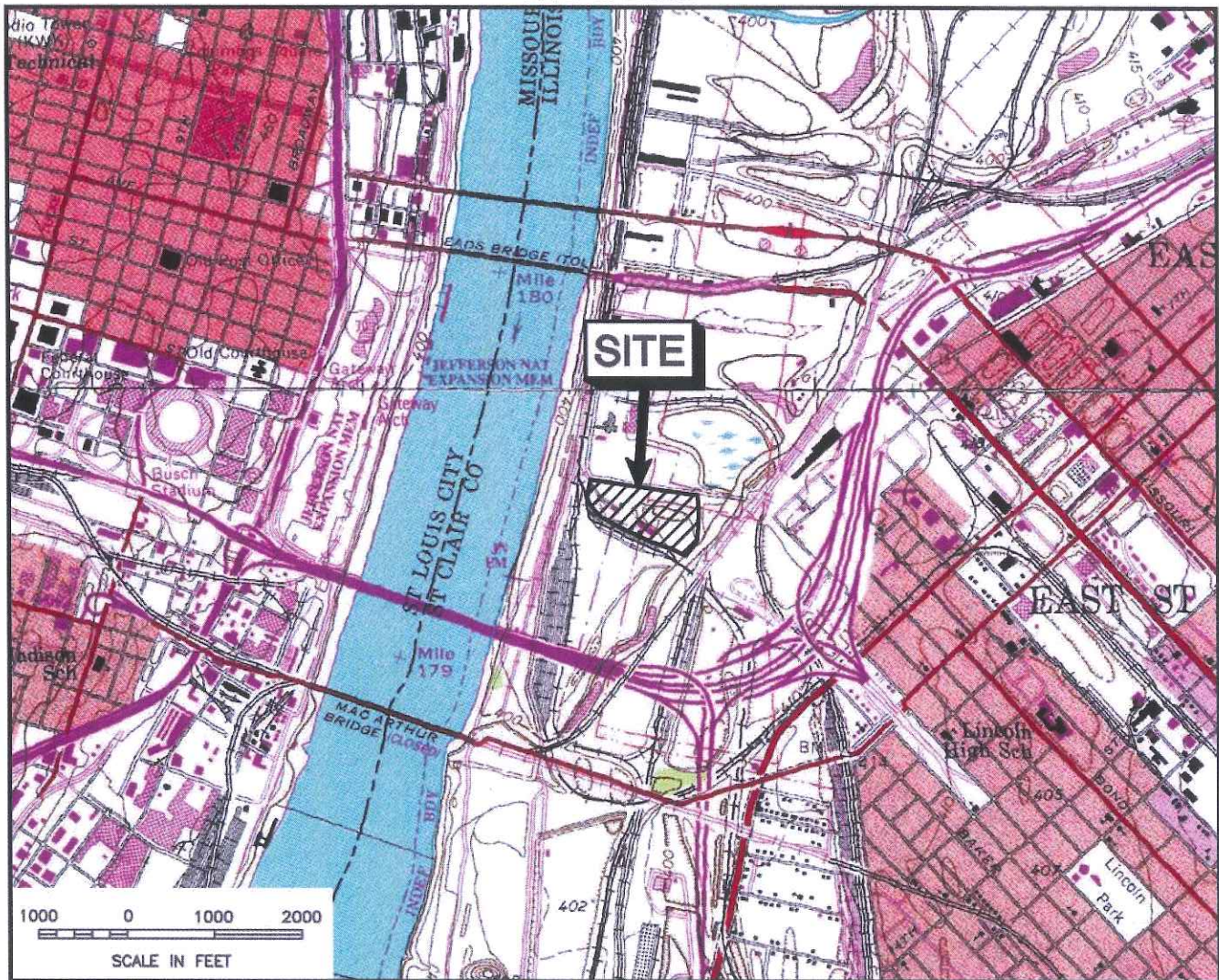
ILLINOIS



ST. CLAIR COUNTY



AREA IN DETAIL



Modified from U.S. Geological Survey, Cahokia & Granite City, Illinois quadrangle, Photorevised 1993.

SCALE IS VARIABLE



COL 62409\080025C-001



TITLE:

SITE LOCATION MAP

DWN:

TMM

DES:

DEM

CHKD:

APPD:

DATE:

12/6/10

REV:

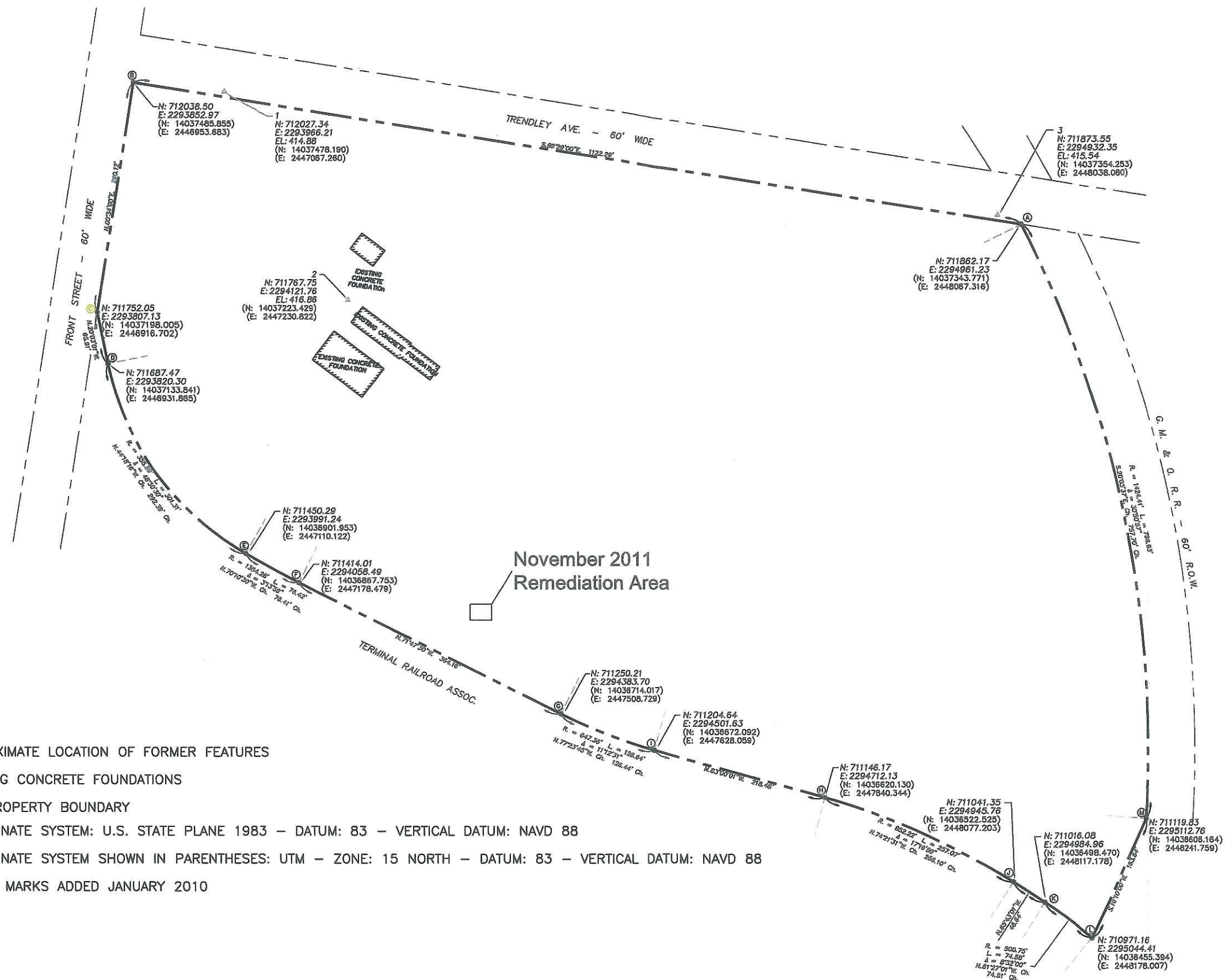
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PROJECT NO.: 3250115533.02

ACF-EAST ST. LOUIS  
EAST ST. LOUIS, ILLINOIS

FIGURE 1



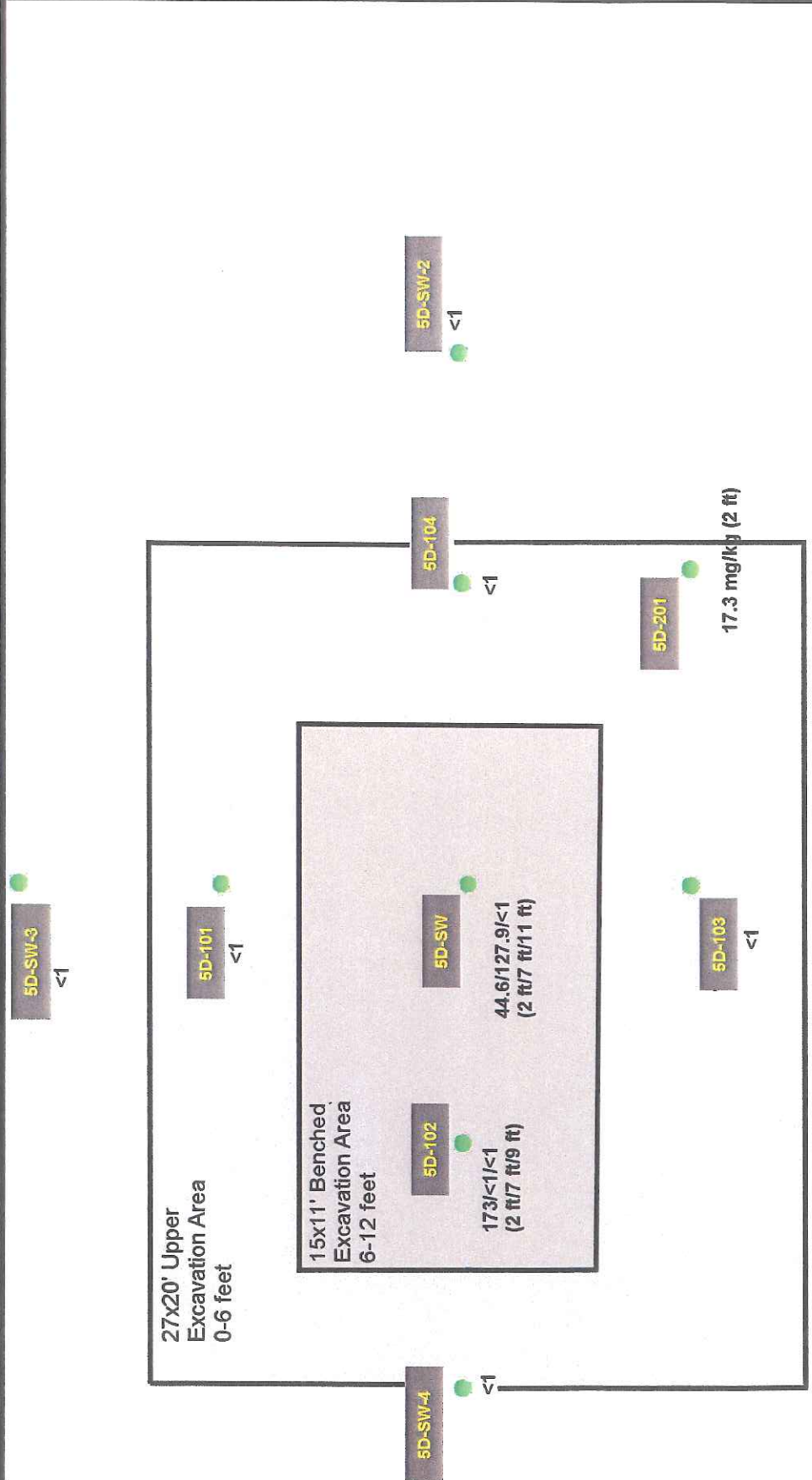


TITLE:  
SITE PROPERTY BOUNDARIES

DWN:	CGS	DES:	DEM
CHKD:		APPD:	
DATE:	01/04/12	REV:	0

PROJECT NO: 3250115533.02  
ACF-EAST ST. LOUIS  
EAST ST. LOUIS, ILLINOIS

FIGURE 2



Soil Boring/Pre-Excavation  
PCB Result (mg/kg)  
Remediation Area

Note: 1. Walls of excavation are vertical.  
2. Lat/Long of 5D-SW= Illinois West SP Ft. N0711374.424, E2294319.162 NAD 83 DD -90.174592W, 38.620361N

Approximate Scale and Geographic North

0 Horizontal 5' Feet

N ↑

November 15, 2011 Remediation Area		ACF East St. Louis, IL	
	DWN: JLG	FORM: DEM	<b>FIGURE 3</b>
	DATE: 1/04/2012	Project Number: 3250116533.02 REV: 0	

**Appendix A**  
**USEPA Approval Letter for**  
**PCB Cleanup, October 13, 2011**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

OCT 13 2011

REPLY TO THE ATTENTION OF:  
LU-9J

CERTIFIED MAIL: 7001 0320 0006 1565 6172  
RETURNED RECEIPT REQUEST

Mr. Rich Hyink  
ACF Industries, LLC  
101 Clark Street  
St. Charles, Missouri 63301-2075

RE: Self-Implementing PCB Cleanup Application  
Former ACF Site  
ILD 006 273 809  
100 Trendley Avenue  
East St. Louis, Illinois 62201

Dear Mr. Hyink:

The U.S. Environmental Protection Agency has completed its review of the September 12, 2011, notification and certification that you intend to conduct a self-implementing cleanup and disposal of Polychlorinated Biphenyl (PCB) remediation waste in accordance with the requirements of 40 Code of Federal Regulations (CFR) §761.61(a).

The cleanup site is a 15 foot by 23 foot area on a 19.9-acre, vacant former industrial property. Soil testing and remediation activities were reportedly performed at the property in 1982 and 1991; however, additional PCB impacts exceeding 50 parts per million (ppm) were identified at the cleanup site during soil testing completed in 2010 and 2011, and are the subject of this self-implementing cleanup. The recent and available historical information was submitted to the Illinois Environmental Protection Agency with the intention of pursuing a Comprehensive No Further Remediation Letter for the subject property.

The site's geologic profile includes urban fill overlying 60 to 75 feet of alluvial silt, sand, and gravel followed by coarse sand and gravel to a depth of 100 to 120 feet below ground surface. Below the coarse alluvium, limestone and dolomite bedrock is present. PCB impacts were delineated within the upper 7 to 11 feet of fill and native soil materials. One monitoring well and eight piezometers have been installed on the subject property, although the locations, results, and depth to water are not discussed.

The subject property is currently vacant and was previously used for the cleaning, repair, blasting, and painting of tank and covered hopper railcars. A prospective purchaser

intends to use the site as a parking lot and Illinois Department of Transportation highway extension. The cleanup site will be remediated to a low-occupancy PCB objective of 50 part per million (ppm) in accordance with 40 CFR § 761.61(a)(4). The cleanup plan anticipates that residual PCBs will be capped where concentrations exceed 1 part per million.

Based on the information provided, PCB impacts were identified at a maximum concentration of 173 ppm at the site. Excavated soils are PCB Remediation Waste and will be disposed of at a RCRA Subtitle C hazardous waste landfill in accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(iii), pending approval from the landfill. It has been proposed that a total of 15 discrete confirmation samples will be collected from the excavation sidewalls and base, and comments regarding this proposed sampling scenario are provided in the attachment that follows.

Based on our review, your notification is hereby approved, subject to the following conditions:

1. As stated in 40 CFR 761.61(a), you must conduct the cleanup in accordance with all applicable requirements of 40 CFR 761.61(a)(1) through (9). A copy of those requirements is enclosed for your convenience. To assist you in completing the cleanup successfully, we have placed an "X" in the margin to identify specific requirements for which your notice is deficient in describing how you plan to comply. Specific comments about each of the deficient areas are noted in bold italics following the regulatory citation.
2. You must prepare a cleanup completion summary report that describes how you conducted the PCB cleanup in accordance with the applicable regulatory requirements, including those marked with an "X" on the enclosure. You must send a copy to Joseph Kelly, Corrective Action Project Manager with Corrective Action Section 1, Remediation and Reuse Branch, Land and Chemicals Division of Region 5 US EPA (77 West Jackson Boulevard, Mail Code LU-9J, Chicago, Illinois 60604-3590) within 60 days after completion of the cleanup.
3. If your cleanup activity includes the use of a fence or a cap that must be maintained in perpetuity, or if any portion of the site is cleaned up to the levels appropriate for low occupancy areas, then you must notify us thirty days prior to any change in ownership of the property. Such notice must include the name, address and telephone number of the new owner, and the name of the new owner's contact person for this matter. You must also submit a letter, signed by the potential purchaser, stating whether it intends to maintain the fence or cap, and whether it plans to maintain the low occupancy land use, or whether it intends to remove and dispose of additional PCB-contaminated soils off-site instead.

Please note that this approval does not relieve you from your duty to comply with all other applicable federal, state, and local requirements. In addition, please note that if you

wish to make any changes to your notification (including changes in the project schedule), then you must submit your proposal to Joseph Kelly, of my staff, in writing no less than 14 calendar days prior to the proposed implementation of the change. If you have any questions, please contact him by e-mail at [kelly.joseph@epa.gov](mailto:kelly.joseph@epa.gov) or by telephone at (312) 353-2111.

Sincerely,

A handwritten signature in black ink, appearing to read "Jose G. Cisneros", written in a cursive style.

Jose G. Cisneros

Chief

Remediation and Reuse Branch

Enclosure

cc: Todd Gross  
Illinois Environmental Protection Agency

Dale Markley  
AMEC

bcc: Joseph Kelly  
US EPA Region 5

Peter Ramanauskas  
US EPA Region 5

## ENCLOSURE

### Regulatory Requirements of 40 CFR 761.61(a)

Please note that an "X" in the margin [ ] indicates that the notification and certification of your intention to conduct a self-implementing cleanup does not adequately explain how you intend to comply with the regulatory requirement.

[ ] (1) **Applicability**

(i) The self-implementing procedures may not be used to clean up:

- (A) Surface or ground waters.
- (B) Sediments in marine and freshwater ecosystems.
- (C) Sewers or sewage treatment systems.
- (D) Any private or public drinking water sources or distribution systems.
- (E) Grazing lands.
- (F) Vegetable gardens.

[ ] (ii) The self-implementing cleanup provisions shall not be binding upon cleanups conducted under other authorities, including but not limited to, actions conducted under section 104 or section 106 of CERCLA, or section 3004(u) and (v) or section 3008(h) of RCRA.

[X] (2) **Site characterization.** Any person conducting self-implementing cleanup of PCB remediation waste must characterize the site adequately to be able to provide the information required by paragraph (a)(3) of this section. Subpart N of this part provides a method for collecting new site characterization data or for assessing the sufficiency of existing site characterization data.

*Characterization for the cleanup site is sufficient for purposes of implementing cleanup in the 345 square foot area where PCBs exceed 50 ppm, provided that verification sampling complies with 40 CFR 761 Subpart O. Characterization for the remainder of the 19.9-acre property does not meet the requirements of §761, and this approval does not pertain to the remainder of the site.*

[ ] (3) **Notification and certification.**

[X] (i) At least 30 days prior to the date that the cleanup of a site begins, the person in charge of the cleanup or the owner of the property where the PCB remediation waste is located shall notify, in writing, the EPA Regional Administrator, the Director of the State or Tribal environmental protection agency, and the Director of the county or local environmental protection agency where the cleanup will be conducted. The notice shall include:

*Please provide notification to State and local environmental agencies at least 30 days prior to initiating cleanup, or request a waiver of the 30-day notification pursuant to §761.61(a)(3)(iii).*

[ ] (A) The nature of the contamination, including kinds of materials contaminated.

- [ ] (B) A summary of the procedures used to sample contaminated and adjacent areas and a table or cleanup site map showing PCB concentrations measured in all pre-cleanup characterization samples. The summary must include sample collection and analysis dates. The EPA Regional Administrator may require more detailed information including, but not limited to, additional characterization sampling or all sample identification numbers from all previous characterization activities at the cleanup site.
- [ ] (C) The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross referenced to the sample identification numbers in the data summary from paragraph (a)(3)(i)(B) of this section.
- [ ] (D) A cleanup plan for the site, including schedule, disposal technology, and approach. This plan should contain options and contingencies to be used if unanticipated higher concentrations or wider distributions of PCB remediation waste are found or other obstacles force changes in the cleanup approach.
- [ ] (E) A written certification, signed by the owner of the property where the cleanup site is located and the party conducting the cleanup, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection. Persons using alternate methods for chemical extraction and chemical analysis for site characterization must include in the certificate a statement that such a method will be used and that a comparison study which meets or exceeds the requirements of subpart Q of this part, and for which records are on file, has been completed prior to verification sampling.
- [ ] (ii) Within 30 calendar days of receiving the notification, the EPA Regional Administrator will respond in writing approving of the self-implementing cleanup, disapproving of the self-implementing cleanup, or requiring additional information. If the EPA Regional Administrator does not respond within 30 calendar days of receiving the notice, the person submitting the notification may assume that it is complete and acceptable and proceed with the cleanup according to the information the person provided to the EPA Regional Administrator. Once cleanup is underway, the person conducting the cleanup must provide any proposed changes from the notification to the EPA Regional Administrator in writing no less than 14 calendar days prior to the proposed implementation of the change. The EPA Regional Administrator will determine in his or her discretion whether to accept the change, and will respond to the change notification verbally within 7 calendar days and in writing within 14 calendar days of receiving it. If the EPA Regional Administrator does not respond verbally within 7 calendar days and in writing within 14 calendar days of receiving the change notice, the person who submitted it may deem it



complete and acceptable and proceed with the cleanup according to the information in the change notice provided to the EPA Regional Administrator.

- [ ] (iii) Any person conducting a cleanup activity may obtain a waiver of the 30-day notification requirement, if they receive a separate waiver, in writing, from each of the agencies they are required to notify under this section. The person must retain the original written waiver as required in paragraph (a)(9) of this section.
- [ ] (4) **Cleanup levels.** For purposes of cleaning, decontaminating, or removing PCB remediation waste under this section, there are four general waste categories: bulk PCB remediation waste, non-porous surfaces, porous surfaces, and liquids. Cleanup levels are based on the kind of material and the potential exposure to PCBs left after cleanup is completed.
- [ ] (i) **Bulk PCB remediation waste.** Bulk PCB remediation waste includes, but is not limited to, the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge.
- [ ] (A) **High occupancy areas.** The cleanup level for bulk PCB remediation waste in high occupancy areas is  $\leq 1$  ppm without further conditions. High occupancy areas where bulk PCB remediation waste remains at concentrations  $> 1$  ppm and  $\leq 10$  ppm shall be covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.
- [ ] (B) **Low occupancy areas.**
- [ ] (1) The cleanup level for bulk PCB remediation waste in low occupancy areas is  $\leq 25$  ppm unless otherwise specified in this paragraph.
- [X] (2) Bulk PCB remediation wastes may remain at a cleanup site at concentrations  $> 25$  ppm and  $\leq 50$  ppm if the site is secured by a fence and marked with a sign including the  $M_L$  mark.  
  
*The proposed remediation objective is 50 ppm. Areas of residual PCB contamination  $> 10$  ppm and  $\leq 25$  ppm that remain following cleanup must be designated as low occupancy areas. Depending the future use of the subject property, areas of residual PCB contamination  $> 25$  ppm and  $< 50$  ppm that remain following cleanup must also either be secured by a fence and marked with a sign including the  $M_L$  mark, or covered with a cap meeting the requirements of paragraphs §761.61(a)(7) and §761.61(a)(8).*
- [X] (3) Bulk PCB remediation wastes may remain at a cleanup site at concentrations  $> 25$  ppm and  $\leq 100$  ppm if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

*The proposed remediation objective is 50 ppm. Areas of residual PCB contamination > 10 ppm and ≤25 ppm that remain following cleanup must be designated as low occupancy areas. Depending the future use of the subject property, areas of residual PCB contamination > 25 ppm and < 50 ppm that remain following cleanup must also either be secured by a fence and marked with a sign including the M<sub>L</sub> mark, or covered with a cap meeting the requirements of paragraphs §761.61(a)(7) and §761.61(a)(8).*

- [ ] (ii) *Non-porous surfaces.* In high occupancy areas, the surface PCB cleanup standard is ≤ 10 µg/100 cm<sup>2</sup> of surface area. In low occupancy areas, the surface cleanup standard is <100 µg/100 cm<sup>2</sup> of surface area. Select sampling locations in accordance with subpart P of this part or a sampling plan approved under paragraph (c) of this section.
- [ ] (iii) *Porous surfaces.* In both high and low occupancy areas, any person disposing of porous surfaces must do so based on the levels in paragraph (a)(4)(i) of this section. Porous surfaces may be cleaned up for use in accordance with §761.79(b)(4) or §761.30(p).
- [ ] (iv) *Liquids.* In both high and low occupancy areas, cleanup levels are the concentrations specified in §761.79(b)(1) and (b)(2).
- [X] (v) *Change in the land use for a cleanup site.* Where there is an actual or proposed change in use of an area cleaned up to the levels of a low occupancy area, and the exposure of people or animal life in or at that area could reasonably be expected to increase, resulting in a change in status from a low occupancy area to a high occupancy area, the owner of the area shall clean up the area in accordance with the high occupancy area cleanup levels in paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

*Since the future redevelopment plans remain uncertain, site occupancy cannot exceed an average of 6.7 hours per week if the low occupancy objectives are utilized unless further information is provided to demonstrate the cleanup objectives for high occupancy use have been met, and/or appropriate controls/caps are in place.*

- [ ] (vi) The EPA Regional Administrator, as part of his or her response to a notification submitted in accordance with §761.61(a)(3) of this part, may require cleanup of the site, or portions of it, to more stringent cleanup levels than are otherwise required in this section, based on the proximity to areas such as residential dwellings, hospitals, schools, nursing homes, playgrounds, parks, day care centers, endangered species habitats, estuaries, wetlands, national parks, national wildlife refuges, commercial fisheries, and sport fisheries.
- [ ] (5) *Site cleanup.* In addition to the options set out in this paragraph, PCB disposal technologies approved under §§761.60 and 761.70 are acceptable for on-site self-

implementing PCB remediation waste disposal within the confines of the operating conditions of the respective approvals.

- [ ] (i) *Bulk PCB remediation waste.* Any person cleaning up bulk PCB remediation waste shall do so to the levels in paragraph (a)(4)(i) of this section.
- [ ] (A) Any person cleaning up bulk PCB remediation waste on-site using a soil washing process may do so without EPA approval, subject to all of the following:
  - (1) A non-chlorinated solvent is used.
  - (2) The process occurs at ambient temperature.
  - (3) The process is not exothermic.
  - (4) The process uses no external heat.
  - (5) The process has secondary containment to prevent any solvent from being released to the underlying or surrounding soils or surface waters.
  - (6) Solvent disposal, recovery, and/or reuse is in accordance with relevant provisions of approvals issued according to paragraphs (b)(1) or (c) of this section or applicable paragraphs of §761.79.
- [ ] (B) Bulk PCB remediation waste may be sent off-site for decontamination or disposal in accordance with this paragraph, provided the waste is either dewatered on-site or transported off-site in containers meeting the requirements of the DOT Hazardous Materials Regulations (HMR) at 49 CFR parts 171 through 180.
- [X] (1) Removed water shall be disposed of according to paragraph (b)(1) of this section.

*In the event liquids are encountered which require disposal (dewatering of groundwater from the excavation or liquids from the remediation waste), they must be sampled in accordance with §761.269 prior to disposal.*
- [ ] (2) Any person disposing off-site of dewatered bulk PCB remediation waste shall do so as follows:
  - ( i ) Unless sampled and analyzed for disposal according to the procedures set out in §§761.283, 761.286, and 761.292, the bulk PCB remediation waste shall be assumed to contain  $\geq 50$  ppm PCBs.
  - ( ii ) Bulk PCB remediation wastes with a PCB concentration of  $< 50$  ppm shall be disposed of in accordance with paragraph (a)(5)(v)(A) of this section.
  - ( iii ) Bulk PCB remediation wastes with a PCB concentration  $\geq 50$  ppm shall be disposed of in a hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA, or a PCB disposal facility approved under this part.
  - ( iv ) The generator must provide written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction EPA Method 3500B/3540C or Method 3500B/3550B followed by chemical analysis using EPA Method 8082 in SW-846 or methods validated under

subpart Q of this part) at least 15 days before the first shipment of bulk PCB remediation waste from each cleanup site by the generator, to each off-site facility where the waste is destined for an area not subject to a TSCA PCB Disposal Approval.

- ☐ (3) Any person may decontaminate bulk PCB remediation waste in accordance with §761.79 and return the waste to the cleanup site for disposal as long as the cleanup standards of paragraph (a)(4) of this section are met.
- ☐ (ii) Non-porous surfaces. PCB remediation waste non-porous surfaces shall be cleaned on-site or off-site for disposal on-site, disposal off-site, or use, as follows:
  - ☐ (A) For on-site disposal, non-porous surfaces shall be cleaned on-site or off-site to the levels in paragraph (a)(4)(ii) of this section using:
    - (1) Procedures approved under §761.79.
    - (2) Technologies approved under §761.60(e).
    - (3) Procedures or technologies approved under paragraph (c) of this section.
  - ☐ (B) For off-site disposal, non-porous surfaces:
    - (1) Having surface concentrations  $<100 \mu\text{g}/100 \text{ cm}^2$  shall be disposed of in accordance with paragraph (a)(5)(i)(B)(2)(ii) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(i).
    - (2) Having surface concentrations  $\geq 100 \mu\text{g}/100 \text{ cm}^2$  shall be disposed of in accordance with paragraph (a)(5)(i)(B)(2)(iii) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(ii).
  - ☐ (C) For use, non-porous surfaces shall be decontaminated on-site or off-site to the standards specified in §761.79(b)(3) or in accordance with §761.79(c).
- ☐ (iii) *Porous surfaces*. Porous surfaces shall be disposed on-site or off-site as bulk PCB remediation waste according to paragraph (a)(5)(i) of this section or decontaminated for use according to §761.79(b)(4), as applicable.
- ☐ (iv) *Liquids*. Any person disposing of liquid PCB remediation waste shall either:
  - (A) Decontaminate the waste to the levels specified in §761.79(b)(1) or (b)(2).
  - (B) Dispose of the waste in accordance with paragraph (b) of this section or an approval issued under paragraph (c) of this section.
- ☐ (v) *Cleanup wastes*. Any person generating the following wastes during and from the cleanup of PCB remediation waste shall dispose of or reuse them using one of the following methods:
  - ☒ (A) Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from cleanup activities shall be either decontaminated

in accordance with §761.79(b) or (c), or disposed of in one of the following facilities, without regard to the requirements of subparts J and K of this part:

- ( 1 ) A facility permitted, licensed, or registered by a State to manage municipal solid waste subject to part 258 of this chapter.
- ( 2 ) A facility permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste subject to §§257.5 through 257.30 of this chapter, as applicable.
- ( 3 ) A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA.
- ( 4 ) A PCB disposal facility approved under this part.

***Disposal of personal protective equipment waste was not discussed in the work plan, but should be handled in accordance with the above mentioned regulations.***

- [ ] (B) Cleaning solvents, abrasives, and equipment may be reused after decontamination in accordance with §761.79.

[ ] (6) *Cleanup verification* —

- [X] (i) *Sampling and analysis.* Any person collecting and analyzing samples to verify the cleanup and on-site disposal of bulk PCB remediation wastes and porous surfaces must do so in accordance with subpart O of this part. Any person collecting and analyzing samples from non-porous surfaces must do so in accordance with subpart P of this part. Any person collecting and analyzing samples from liquids must do so in accordance with §761.269. Any person conducting interim sampling during PCB remediation waste cleanup to determine when to sample to verify that cleanup is complete, may use PCB field screening tests.

***A total of 15 cleanup verification samples have been proposed (three from each excavation wall/base); since verification sampling must meet the requirements of §761 Subpart O, additional samples must be collected. Samples may be composited in accordance with the procedures outlined in §761 Subpart O to reduce analytical costs.***

- [ ] (ii) *Verification.*
  - (A) Where sample analysis results in a measurement of PCBs less than or equal to the levels specified in paragraph (a)(4) of this section, self-implementing cleanup is complete.
  - (B) Where sample analysis results in a measurement of PCBs greater than the levels specified in paragraph (a)(4) of this section, self-implementing cleanup of the sampled PCB remediation waste is not complete. The owner or operator of the site must either dispose of the sampled PCB remediation waste, or re-clean the waste represented by the sample and reinitiate sampling and analysis in accordance with paragraph (a)(6)(i) of this section.

- [X] (7) **Cap requirements.** A cap means, when referring to on-site cleanup and disposal of PCB remediation waste, a uniform placement of concrete, asphalt, or similar material of minimum thickness spread over the area where remediation waste was removed or left in place in order to prevent or minimize human exposure, infiltration of water, and erosion. Any person designing and constructing a cap must do so in accordance with §264.310(a) of this chapter, and ensure that it complies with the permeability, sieve, liquid limit, and plasticity index parameters in §761.75(b)(1)(ii) through (b)(1)(v). A cap of compacted soil shall have a minimum thickness of 25 cm (10 inches). A concrete or asphalt cap shall have a minimum thickness of 15 cm (6 inches). A cap must be of sufficient strength to maintain its effectiveness and integrity during the use of the cap surface which is exposed to the environment. A cap shall not be contaminated at a level  $\geq 1$  ppm PCB per Aroclor<sup>TM</sup>(or equivalent) or per congener. Repairs shall begin within 72 hours of discovery for any breaches which would impair the integrity of the cap.

*Depending on the final verification results, should a cap be used as a means of demonstrating compliance with the cleanup objectives, documentation should be provided to demonstrate that the final cap meets all of the prescribed requirements, including thickness and physical parameters.*

- [X] (8) **Deed restrictions for caps, fences and low occupancy areas.** When a cleanup activity conducted under this section includes the use of a fence or a cap, the owner of the site must maintain the fence or cap, in perpetuity. In addition, whenever a cap, or the procedures and requirements for a low occupancy area, is used, the owner of the site must meet the following conditions:

*Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.*

- [ ] (i) Within 60 days of completion of a cleanup activity under this section, the owner of the property shall:

- [X] (A) Record, in accordance with State law, a notation on the deed to the property, or on some other instrument which is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property:
- (1) That the land has been used for PCB remediation waste disposal and is restricted to use as a low occupancy area as defined in §761.3.
  - (2) Of the existence of the fence or cap and the requirement to maintain the fence or cap.
  - (3) The applicable cleanup levels left at the site, inside the fence, and/or under the cap.

***Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.***

- [X] (B) Submit a certification, signed by the owner, that he/she has recorded the notation specified in paragraph (a)(8)(i)(A) of this section to the EPA Regional Administrator.

***Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.***

- [ ] (ii) The owner of a site being cleaned up under this section may remove a fence or cap after conducting additional cleanup activities and achieving cleanup levels, specified in paragraph (a)(4) of this section, which do not require a cap or fence. The owner may remove the notice on the deed no earlier than 30 days after achieving the cleanup levels specified in this section which do not require a fence or cap.
- [ ] (9) **Recordkeeping.** For paragraphs (a)(3), (a)(4), and (a)(5) of this section, recordkeeping is required in accordance with §761.125(c)(5).

## **Appendix B**

### **Site Photographs**





Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

PCB remediation area  
prior to excavation

**Date:** Nov. 15, 2011

**Photo No:** 1



**Photographer:**

Dale Markley

**Description:**

Loading for off-site  
transport

**Date:** Nov. 15, 2011

**Photo No.** 2





Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Initial excavation at  
deepest impact

**Date:** Nov. 15, 2011

**Photo No:** 3



**Photographer:**

Dale Markley

**Description:**

Benching of excavation  
to remove visible black  
fill areas

**Date:** Nov. 15, 2011

**Photo No.** 4







Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Site road improvement

**Date:** Nov. 15, 2011

**Photo No:** 5



**Photographer:**

Dale Markley

**Description:**

Site road improvement

**Date:** Nov. 15, 2011

**Photo No.** 6





Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Sampling side-walls of  
excavation.

**Date:** Nov. 15, 2011

**Photo No:** 7



**Photographer:**

Dale Markley

**Description:**

Sampling deeper areas  
of excavation

**Date:** Nov. 15, 2011

**Photo No.** 8







Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Completed excavation,  
note deeper areas are  
fine sand.

**Date:** Nov. 17, 2011

**Photo No:** 9



**Photographer:**

Dale Markley

**Description:**

Backfilling with lime  
fines, white in color

**Date:** Nov. 17, 2011

**Photo No.** 10





Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Completed backfilling

**Date:** Nov. 18, 2011

**Photo No:** 11



**Photographer:**

Dale Markley

**Description:**

Access road vegetation  
clearing on east side of  
site

**Date:** Nov. 18, 2011

**Photo No.** 12







Project Name: Former ACF Railcar Facility

Location: 100 Trendley Avenue

East St. Louis, Illinois

Project No: 3250115533

## PHOTOGRAPHS

**Photographer:**

Dale Markley

**Description:**

Access road vegetation  
clearing on east side of  
site

**Date:** Nov. 18, 2011

**Photo No:** 13



**Photographer:**

Dale Markley

**Description:**

Access road vegetation  
clearing along Trendley  
fence line

**Date:** Nov. 18, 2011

**Photo No.** 14





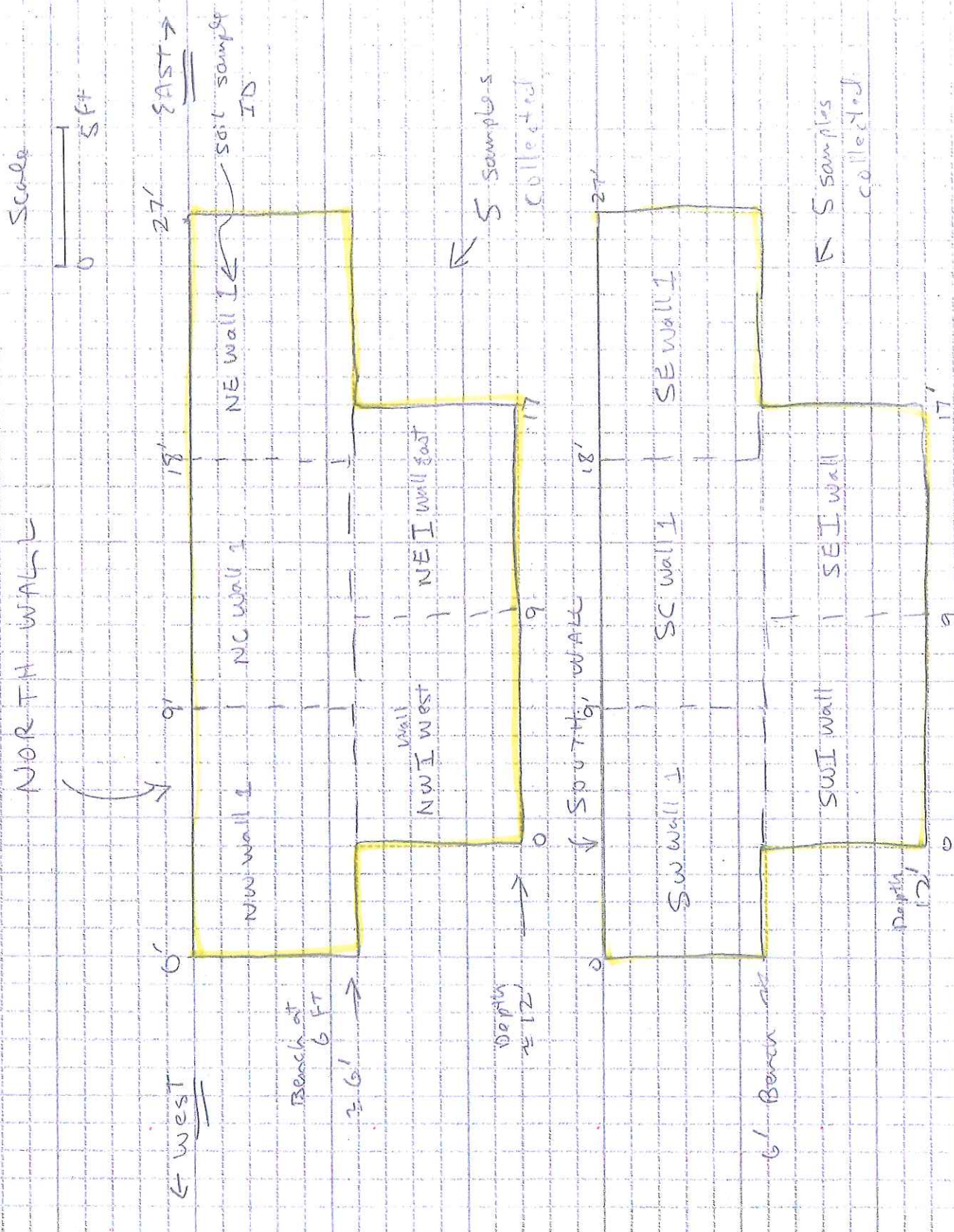


**Appendix C**  
**Field Notes for**  
**Excavation Dimensions and Sample**  
**Locations**





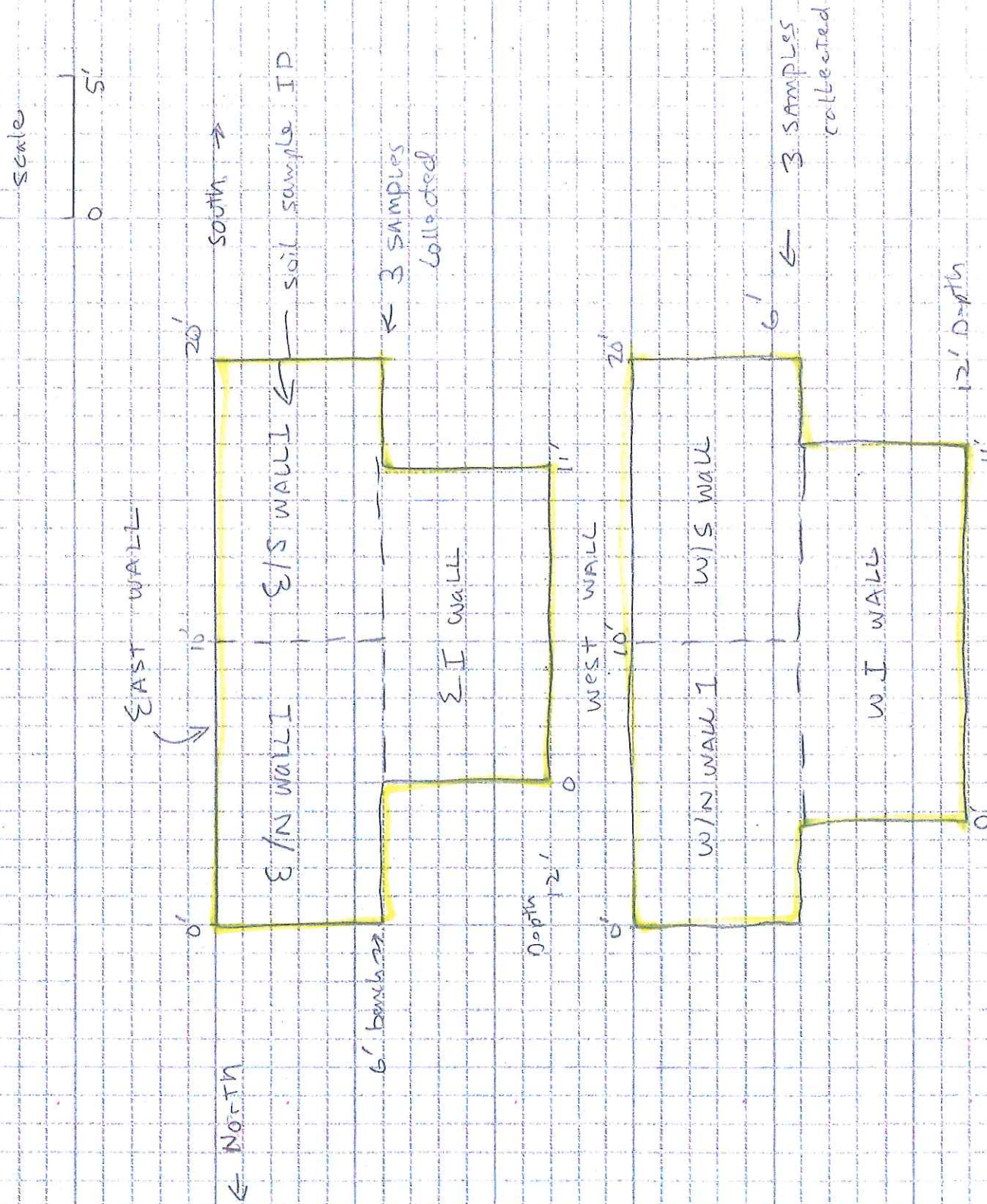
JOB NO. 3250115533 SHEET 1 OF 3  
 PHASE - TASK 3  
 JOB NAME ACE - East St. Louis, IL  
 BY Dale Markley DATE 11/15/11  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_







JOB NO. 3250115533 SHEET 2 OF 3  
 PHASE - TASK 3  
 JOB NAME ACF - East St. Louis, IL  
 BY Dale Markley DATE 11/15/11  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_





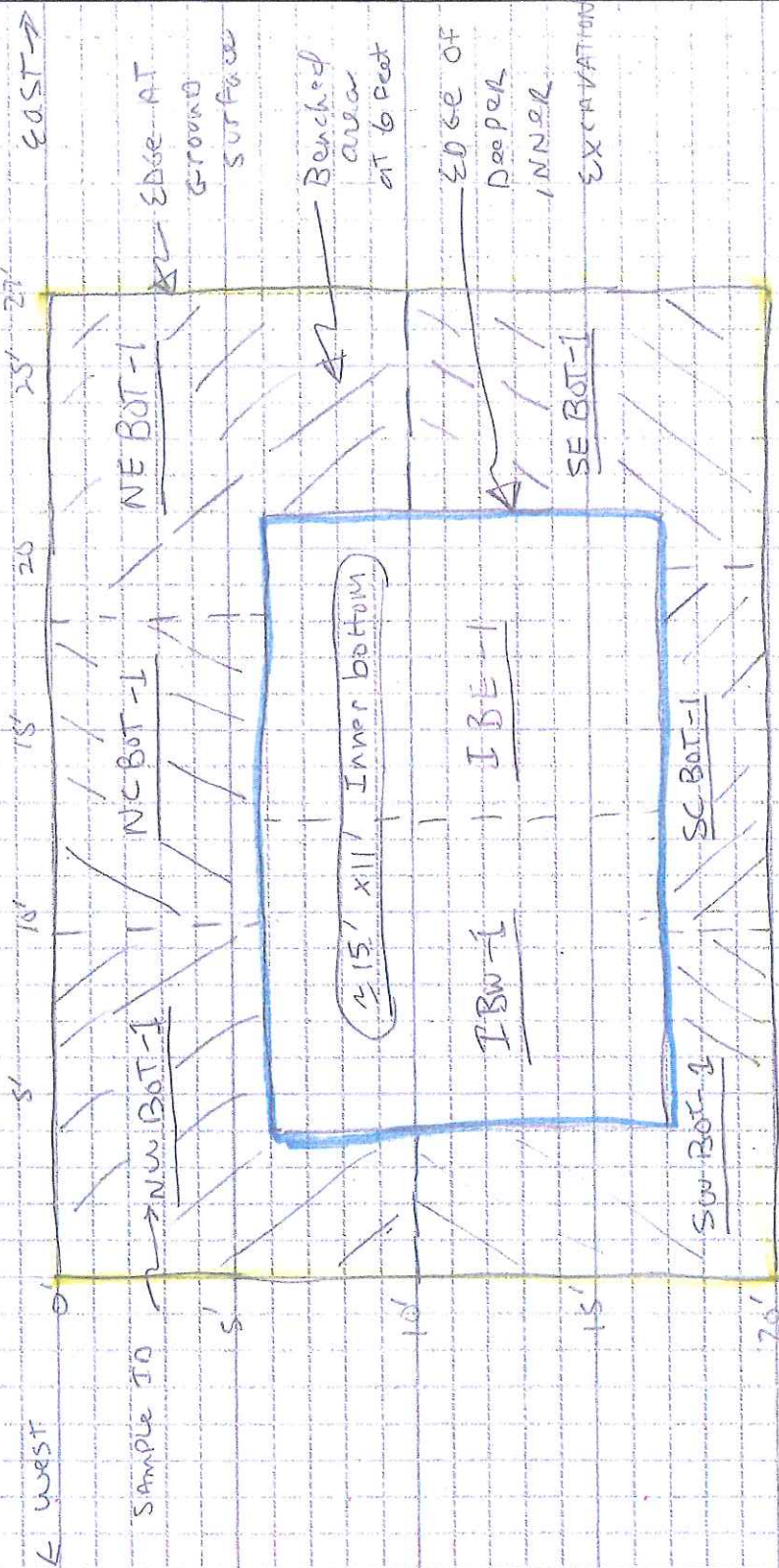


3199 Riverport Tech Center Drive  
St. Louis, MO 63043

JOB NO. 3250115533 SHEET 3 OF 3  
PHASE — TASK 3  
JOB NAME ACF - East St. Louis, IL.  
BY Dale Markley DATE 11/15/11  
CHECKED BY — DATE —

# BOTTOM OF EXCAVATION

NORTH



SOUTH

8 samples collected





## **Appendix D**

### **Summary of Loads and Excavated Soil Manifests**



Former ACF Railcar Facility

East St. Louis, IL

Summary of Loads Hauled November 15, 2011

DATE	TIME	TRUCK	MAN. DOC. #	DOC. #	EMPTY WEIGH T	FULL WEIGH T	NET WT.	DISPOSAL LOCATION	W.S.#	NET WT. IN TONS	WEIGH T (kg)	PCB Out of Service
11/15/11	2:13 PM	54	000441091WAS	3150657	30740	80020	49280	T2(NE)(SE)I9-4	130856-1	24.64	22,400	11/15/2011
11/15/11	2:14 PM	52	000441092WAS	3150659	29360	81480	52120	T2(NE)(SE)I9-4	130856-1	26.06	23,691	11/15/2011
11/15/11	2:29 PM	58	000441094WAS	3150663	30800	78480	47680	T2(NE)(SE)I9-4	130856-1	23.84	21,673	11/15/2011
11/15/11	3:51 PM	56	000441639WAS	3150635	30020	80760	50740	T2(NE)(SE)I9-4	130856-1	25.37	23,064	11/15/2011
11/15/11	3:57 PM	38820	000441641WAS	3150639	28780	67780	39000	T2(NE)(SE)I9-4	130856-1	19.5	17,727	11/15/2011
11/15/11	4:30 PM	500	000441093WAS	3150661	25740	79220	53480	T2(NE)(SE)I9-4	130856-1	26.74	24,309	11/15/2011
11/15/11	4:50 PM	38660	000441640WAS	3150637	29040	79620	50580	T2(NE)(SE)I9-4	130856-1	25.29	22,991	11/15/2011
total tons										171.44		

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 110005273004		2. Page 1 of 1		3. Emergency Response Phone (336) 293-2707		4. Manifest Tracking Number 000441641WAS	
		5. Generator's Name and Mailing Address ACF INDUSTRIES, INC. / RICHARD HYINK 101 CLARE STREET SAINT CHARLES, MO 63301 (336) 293-2707						Generator's Site Address (if different than mailing address) ACF INDUSTRIES, INC. / RICHARD HYINK 101 TRENDLEY AVENUE SAINT SAINT LOUIS, IL 62304 GEN: 130675	
6. Transporter 1 Company Name DEELMAN TRUCK COMPANY		U.S. EPA ID Number 11000155332							
7. Transporter 2 Company Name		U.S. EPA ID Number							
8. Designated Facility Name and Site Address HESITANT ENVIRONMENTAL SERVICES 4370 W. COUNTY ROAD 1275 N. BOONVILLE, IN 46102 Facility's Phone: (765) 489-2704		U.S. EPA ID Number 11000050299							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
					No.	Type			
	1.	POLYCHLORINATED BIPHENYLS, SOLID, 9. POLY (PCB PENETRATION PASTE - SOLID), (PCB) (44) (PCB) (17)			1	DR			
	2.								
	3.								
14. Special Handling Instructions and Additional Information 1. HL 0005002, 1100050439 EARLIEST DATE OF REMOVAL FROM SERVICE									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Offeror's Printed/Typed Name: <u>Richard Hyink</u> Signature: <u>Richard Hyink</u> Month: <u>11</u> Day: <u>10</u> Year: <u>1991</u>									
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name: _____ Signature: _____ Month: <u>11</u> Day: <u>10</u> Year: <u>1991</u>									
Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____									
18. Discrepancy									
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
Manifest Reference Number: _____									
18b. Alternate Facility (or Generator) U.S. EPA ID Number: _____									
Facility's Phone: _____									
18c. Signature of Alternate Facility (or Generator) _____ Month: _____ Day: _____ Year: _____									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. <u>1100</u> 2. _____ 3. _____ 4. _____									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____									

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 110005270019	2. Page 1 of 1	3. Emergency Response Phone 1-800-424-9331	4. Manifest Tracking Number 000041640149	
5. Generator's Name and Mailing Address ACR INDUSTRIES, LLC / RICHARD HYINK 101 CLARK STREET CADET CHARLES, MO 63001 Generator's Phone: (636) 233-2707			Generator's Site Address (if different than mailing address) ACR INDUSTRIES, LLC / RICHARD HYINK 100 TRENCH AVENUE EAST CADA LOUIS, IL 62201 USE: 130005			
6. Transporter 1 Company Name DELLERD TRUCK COMPANY			U.S. EPA ID Number 110005270019			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address HERITAGE ENVIRONMENTAL SERVICES 4570 E. COUNTY ROAD 1275 E. ROCKFORD, IL 61052 Facility's Phone: (815) 402-2704			U.S. EPA ID Number 110005270019			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity
				No.	Type	12. Unit Wt./Vol.
	1.	1.	RD, UNRACED POLYMERCONTAMINATED ALIPHENYL, SOLID, F011, PCB REGENERATION WASTE - SOLID, (P01) (L) (E) (S) (H) (1)	1	PT	E
	2.					
	3.					
14. Special Handling Instructions and Additional Information 1. AL, 0000002, 110005270019 EARLIEST DATE OF REMOVAL FROM SERVICE: 01/01/2001						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offor's Printed/Typed Name: Richard Hyink Signature: Richard Hyink Month: Day: Year:						
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
	Transporter signature (for exports only):					
	17. Transporter Acknowledgment of Receipt of Materials					
DESIGNATED FACILITY	Transporter 1 Printed/Typed Name: Signature: Month: Day: Year:					
	Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:					
	18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator): U.S. EPA ID Number:						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator): Month: Day: Year:						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name: Signature: Month: Day: Year:						

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number IL00000135235		2. Page 1 of 1	3. Emergency Response Phone (636) 233-2707		4. Manifest Tracking Number 000441639WAB			
5. Generator's Name and Mailing Address ACK INDUSTRIES, LLC / RICHARD HYINK 101 CLARK STREET SAINT CHARLES, MO 63301 Generator's Phone: (636) 233-2707					Generator's Site Address (if different than mailing address) ACK INDUSTRIES, LLC / RICHARD HYINK 100 THOMAS AVE EAST SAINT LOUIS, IL 62201 GEN: 130556					
6. Transporter 1 Company Name BECLER TRUCK COMPANY 818/51					U.S. EPA ID Number IL0000135235					
7. Transporter 2 Company Name					U.S. EPA ID Number					
8. Designated Facility Name and Site Address MONTAGS ENVIRONMENTAL SERVICES 4370 E. COUNTY ROAD 1275 N. MACHIALE, IL 60122 Facility's Phone: (708) 435-2704					U.S. EPA ID Number IL00000135235					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	1	RD, UN3492, POLYCHLORINATED BIPHENYLS, SOLID, 3, P011, PCB REMEDIATION WASTE - SOLID, (RQ11) (RQ12)			1		DT	5	KG	
	2									
	3									
	4									
14. Special Handling Instructions and Additional Information I.M. 264002, 112150235 EARLIEST DATE OF REMOVAL FROM SERVICE _____ NOTED: 11/15/11 112150235										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Offor's Printed/Typed Name Richard Hyink					Signature Richard Hyink		Month Day Year 11 15 11			
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ Transporter signature (for exports only): _____									
	17. Transporter Acknowledgment of Receipt of Materials									
	Transporter 1 Printed/Typed Name R. S. S. S.				Signature R. S. S. S.		Month Day Year 11 15 11			
Transporter 2 Printed/Typed Name				Signature		Month Day Year				
DESIGNATED FACILITY	18. Discrepancy									
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____									
	18b. Alternate Facility (or Generator) U.S. EPA ID Number									
	Facility's Phone: _____									
	18c. Signature of Alternate Facility (or Generator) Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)										
1. R102		2.		3.		4.				
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a.										
Printed/Typed Name					Signature		Month Day Year			



<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 110000000000	2. Page 1 of 1	3. Emergency Response Phone 1-800-424-2777	4. Manifest Tracking Number 000001000000
5. Generator's Name and Mailing Address ACF INDUSTRIES, INC. / RICHARD WYLLIE 100 CORE STREET CHATELAIN, MO 63001 Generator's Phone: (636) 274-2700		Generator's Site Address (if different than mailing address) ACF INDUSTRIES, INC. / RICHARD WYLLIE 100 TOWNHILL AVENUE CHATELAIN, MO 63001 GEN: 130236			
6. Transporter 1 Company Name BRENNAN TRUCK COMPANY		U.S. EPA ID Number 110000000000			
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address HERITAGE ENVIRONMENTAL SERVICES 4370 N. COUNTY ROAD 1275 B. BOONVILLE, IN 46108 Facility's Phone: (765) 409-2700		U.S. EPA ID Number 110000000000			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
1.	NO. UNITS: POLYCHLORINATED BIPHENYLS, SOLID, S.P.111, (FOR PRECIPITATION WASTE - SOLID)	1	U2	1	kg
2.					
3.					
4.					
13. Waste Codes					
14. Special Handling Instructions and Additional Information 1.43 000002 10000000 HAWAIIAN DATE OF REMOVAL FROM SERVICE 10/10/00 10000000					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name Richard Wyllie		Signature Richard Wyllie		Month 10	Day 10
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Transporter signature (for exports only): Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Derek Camels		Signature Derek Camels		Month 11	Day 10
Transporter 2 Printed/Typed Name		Signature		Month 11	Day 10
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
18b. Alternate Facility (or Generator)		U.S. EPA ID Number			
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)		Month Day Year			
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1.	2.	3.	4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name		Signature		Month	Day Year

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number ITD065270909		2. Page 1 of 1		3. Emergency Response Phone 1-800-424-2777		4. Manifest Tracking Number 000001073405		
		5. Generator's Name and Mailing Address ACT INDUSTRIES, LLC / RICHARD HYINK 101 CLARK STREET SAINT CHARLES, MO 63041 Generator's Phone: 1-800-424-2777		Generator's Site Address (if different than mailing address) ACT INDUSTRIES, LLC / RICHARD HYINK 101 TRENDLEY AVENUE SAINT SAINT LOUIS, IL 63101 GEN: 1-800-424-2777						
6. Transporter 1 Company Name PACIFIC TRUCK COMPANY		U.S. EPA ID Number IL00015006		7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address HERITAGE ENVIRONMENTAL SERVICES 2770 N. COUNTY ROAD 1275 N. MERCER, IN 46011 Facility's Phone: 1-800-424-2777		U.S. EPA ID Number IN000070000								
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
						No.	Type			
	1.	AC, UNCLASSED, POLYCHLORINATED BIPHENYLE, SOLID, PG III, PCB REMEDIATION WASTE - CORR.				1	BT	99.727		
	2.									
	3.									
	4.									
14. Special Handling Instructions and Additional Information 1. 01 0645062, IN0150661 EARLIEST DATE OF REMOVAL FROM SERVICE										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Officer's Printed/Typed Name: Richard Hyink Signature: [Signature] Month: 10 Day: 10 Year: 11										
16. International Shipments: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:										
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: [Name] Signature: [Signature] Month: 10 Day: 15 Year: 11 Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:										
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: U.S. EPA ID Number:										
18b. Alternate Facility (or Generator) U.S. EPA ID Number: Facility's Phone:										
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:										
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4.										
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name: Signature: Month: Day: Year:										

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 110000073002		2. Page 1 of 1		3. Emergency Response Phone (636) 270-2707		4. Manifest Tracking Number 110000073002									
		5. Generator's Name and Mailing Address RCP INDUSTRIES, LLC / RICHARD HYINK 101 CLARK BLVD SAINT CHARLES, MO 63043 Generator's Phone: (636) 270-2707		Generator's Site Address (if different than mailing address) RCP INDUSTRIES, LLC / RICHARD HYINK 101 CLARK BLVD SAINT CHARLES, MO 63043 Site: (636) 270-2707													
<b>GENERATOR</b>		6. Transporter 1 Company Name INDUSTRIAL TRUCK COMPANY						U.S. EPA ID Number 110000073002									
		7. Transporter 2 Company Name						U.S. EPA ID Number									
<b>DESIGNATED FACILITY</b>		8. Designated Facility Name and Site Address HEALTHY ENVIRONMENTAL SERVICES 4000 W. COUNTY ROAD 12TH N. POMONA, IN 46177 Facility's Phone: (317) 425-2704						U.S. EPA ID Number (110000073002)									
		9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))						10. Containers		11. Total Quantity							
<b>TRANSPORTER INTL</b>		1. 10,000 LBS POLYCHLORINATED BIPHENYLS, SOLID, LIQUID, FOR RECRYCLATION WASTE - SOLID, (Hazard Class 9.1)						No. 1 Type 10		22.717		12. Unit Wt./Vol.		13. Waste Codes			
<b>DESIGNATED FACILITY</b>		14. Special Handling Instructions and Additional Information 1. ALL WASTE MUST BE HANDLED BY SPECIALIZED PERSONNEL EARLIEST DATE OF REMOVAL FROM SERVICE: 11/14/02						15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
		Generator's/Offor's Printed/Typed Name Richard Hyink						Signature Richard Hyink		Month Day Year 11 15 02							
		16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:															
		17. Transporter Acknowledgment of Receipt of Materials															
		Transporter 1 Printed/Typed Name Richard Hyink						Signature Richard Hyink		Month Day Year 11 15 02							
Transporter 2 Printed/Typed Name						Signature		Month Day Year									
<b>DESIGNATED FACILITY</b>		18. Discrepancy															
		18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection															
		18b. Alternate Facility (or Generator)						U.S. EPA ID Number									
		Facility's Phone:															
		18c. Signature of Alternate Facility (or Generator)						Month Day Year									
<b>DESIGNATED FACILITY</b>		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)															
		1. 110000073002		2. 110000073002		3. 110000073002		4. 110000073002									
		20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a															
		Printed/Typed Name						Signature		Month Day Year							

GENERATOR'S INITIAL COPY

**Appendix E**

**Confirmation Sample Analytical  
Laboratory Results and AMEC Evaluation**



**PCB Data Review Report  
Sample Delivery Group 11110662  
For 100 East Trendley Avenue,  
East St. Louis, Illinois**

**Prepared for:  
ACF Industries, LLC  
101 Clark Street  
St. Charles, Missouri 63301**



**AMEC Environment & Infrastructure, Inc.  
3199 Riverport Tech Center Drive  
St. Louis, Missouri 63043**

**AMEC Environment & Infrastructure Project No. 3250115533  
December 30, 2011**





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## 1. Introduction

This report summarizes the findings of the data review of twenty-four (24) soil samples. These samples were collected on November 15, 2011 as part of the ACF, East St Louis site polychlorinated biphenyls (PCB) soil investigation. The data were reviewed in accordance with the standard methods and the principles presented of USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999). The analysis methods provided additional guidance during the data validation effort. The laboratory parameters and methods for which the samples were analyzed are identified in the table below.

Parameters	Analyzed Method
Polychlorinated Biphenyls (PCBs)	SW-846 8082

Note:

SW-846 – "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 3rd Edition, USEPA, November 1986 and its updates.

The data were reviewed, where applicable, for completeness and compliance with analytical holding times. The data were also reviewed for compliance to accuracy limits for surrogate recoveries, laboratory control samples (LCS), matrix spike (MS) and matrix spike duplicate (MSD) recoveries. If present, matrix duplicate samples and co-located field samples were evaluated to assess compliance with precision requirements. Laboratory method blank results were reviewed for evidence of contamination and potential impacts on the project sample results.

## 2. Executive Summary

Samples were analyzed in one Sample Delivery Group (SDG) number 11110662. The data review process was implemented to assess the quality of data resulting from the field sampling program. The process determined whether the data met the Quality Assurance (QA) / Quality Control (QC) objectives established for the project. Data assessment involved a consideration of data use, the decision type, identification of data that were qualified or did not meet project QA/QC requirements, and limitations on data use. The data review was based on the laboratory data summary reports. All data met the data quality objective (DQO) of a Level II data package. The qualifiers applied during review are described below. The data, as qualified, are useable for their intended purpose.

Qualifier	Definition
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. Sample results may be biased high.
R	The analyte was analyzed for, but the presence or absence of the analyte cannot be verified and the result is rejected.

### 3. SDG 11110662

The samples associated with the SDGs are listed in the table below.

SW I Wall	SE I Wall	E I Wall	NE I W - East
NW I W - West	W I Wall	IBE-1	IBW-1
SE BOT-1	SC BOT-1	NE BOT 1	NC BOT 1
W/S Wall 1	W/N Wall 1	E/S Wall 1	E/N Wall 1
NW BOT 1	SW BOT 1	NC Wall 1	NE Wall 1
NW Wall 1	SC Wall 1	SW Wall 1	SE Wall 1

The areas of review are listed below. A solid dot (●) indicates an area of review in which all data were acceptable without qualification, an open dot (○) signifies an area where issue(s) raised during the validation impacted data quality and/or usability.

- Data Completeness
- Holding Times and Preservation
- Blanks
- Surrogates
- Laboratory Control Samples
- Matrix Spike/Matrix Spike Duplicate
- Field Duplicates

#### 3.1 Data Completeness

The data package was reviewed to verify that the SDG contained the data required in the deliverable and that all samples listed on the chain-of-custody (COC) forms were analyzed for the requested parameters. The review indicated that the data package was complete.

##### 3.1.1 Holding Times and Preservation

The validity of the analytical results can be based partially on the holding time and preservation of the sample from the time of collection to the time of analysis. The samples were received in good condition. All samples were received at 19.4° C. The elevated temperature was due to the fact that samples had been collected and taken immediately to the laboratory not having had sufficient time to reach holding temperature. The samples were taken by the laboratory where they reached the holding temperature and were maintained. The sample preservation criteria met. The samples were extracted and analyzed within the acceptable holding times for each analysis. All analytical holding times were met for this data.

##### 3.1.2 Blanks

Two (2) method blanks were reviewed with the field samples and Quality Control (QC) samples. No detections were observed in method blanks. Qualification of the field samples was not required.

### 3.1.3 Surrogates

Surrogate standards or system monitoring compounds are defined as non-target compounds added to blanks, laboratory QC samples, and field samples prior to extraction or purging. They are used in organic analyses to monitor the percent recovery efficiencies or accuracy of the sample preparation and analytical procedures. In SDG 1110662 surrogate recovery criteria were met for all samples with the exception of the samples listed below.

NE I W – East	NW I W - West	W I Wall	W/S Wall 1
W/N Wall 1	E/S Wall 1	E/N Wall 1	NW BOT 1
NC Wall 1	NE Wall 1	NW Wall 1	SC Wall 1
SW Wall 1	SE Wall 1		

The PCB decachlorobiphenyl surrogate recovery for two samples NE Wall 1 and NW Wall 1 were below the acceptance criteria of 30% and all the remaining samples (12) listed were above the recovery acceptance criteria limit of 150%. Sample surrogate recoveries being out of the acceptance criteria limits may be due to matrix interference. Samples NE Wall 1 and NW Wall 1 had zero (0) percent recovery of the surrogate. The qualification of the sample results with zero percent recovery was the sample non-detects were flagged as "R". Those remaining 12 samples that had the surrogate recoveries greater than the upper acceptance limit may be biased high. Data qualification of these sample results was the qualifier "J" applied to all detects. One (1) of these samples (W I Wall) with surrogate recovery over the acceptance criteria had no detects in the sample results and thus no qualifications.

### 3.1.4 Laboratory Control Samples

The laboratory control samples (LCS) demonstrated satisfactory recovery of target analytes during extraction workup of the QA/QC sample group. No qualification was required.

### 3.1.5 Matrix Spikes/Matrix Spike Duplicates

Two (2) matrix spikes/matrix spike duplicates were analyzed with these sample analyses. All percent recoveries and relative percent differences (RPD) for the matrix spikes and matrix spike duplicates were within acceptance criteria. One MS/MSD had a surrogate recovery that was not within acceptance criteria. This may be due to matrix interference. No qualification of data was performed based on this information alone.

### 3.1.6 Field Duplicates

No field duplicates were identified in this SDG.

## 4. Qualified Data Sheet

Data sheets from the Teklab, Inc. Laboratory Analytical Results Report with the qualifiers added are attached.



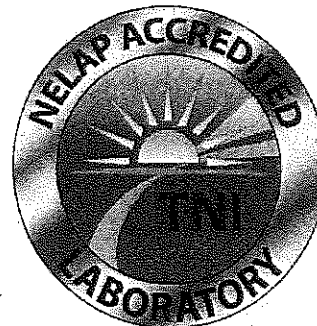


## **Qualified Data Sheets**



November 16, 2011

Dale E. Markley  
AMEC Environment & Infrastructure, Inc.  
3199 Riverport Tech Center Drive  
St. Louis, MO 63043  
TEL: (314) 209-5943  
FAX: (314) 209-5929



RE: AMEC 3250115533-3

WorkOrder: 11110662

Dear Dale E. Markley:

TEKLAB, INC received 24 samples on 11/15/2011 1:57:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley  
Project Manager  
(618)344-1004 ex 33  
[ehurley@teklabinc.com](mailto:ehurley@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

This reporting package includes the following:

Cover Letter	1
Report Contents	2
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Case Narrative	4
Laboratory Results	5
Quality Control Results	29
Receiving Check List	32
Chain of Custody	Appended

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

### Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TNTC Too numerous to count ( > 200 CFU )

### Qualifiers

- |  |  |
|--|--|
| # - Unknown hydrocarbon                        | B - Analyte detected in associated Method Blank        |
| E - Value above quantitation range             | H - Holding times exceeded                             |
| J - Analyte detected below quantitation limits | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit       | R - RPD outside accepted recovery limits               |
| S - Spike Recovery outside recovery limits     | X - Value exceeds Maximum Contaminant Level            |





## Case Narrative

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Cooler Receipt Temp: 19.4 °C

### Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	kmccclain@teklabinc.com	Email	dthompson@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2012	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2012	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2012	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2012	Springfield
Arkansas	ADEQ	88-0966		3/14/2012	Collinsville
Illinois	IDPH	17584		4/30/2012	Collinsville
Kentucky	UST	0073		5/26/2012	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2012	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-001

Client Sample ID: SW I Wall

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		10.7	%	1	11/15/2011 16:11	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1221	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1232	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1242	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1248	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1254	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Aroclor 1260	NELAP	42.0		ND	µg/Kg-dry	1	11/15/2011 22:47	72924
Surr: Decachlorobiphenyl		5-156		97.8	%REC	1	11/15/2011 22:47	72924
Surr: Tetrachloro-meta-xylene		7.35-123		66.8	%REC	1	11/15/2011 22:47	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-002

Client Sample ID: SE 1 Wall

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		12.2	%	1	11/15/2011 16:12	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1221	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1232	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1242	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1248	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1254	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Aroclor 1260	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 23:38	72924
Surr: Decachlorobiphenyl		5-156		104.1	%REC	1	11/15/2011 23:38	72924
Surr: Tetrachloro-meta-xylene		7.35-123		70.7	%REC	1	11/15/2011 23:38	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-003

Client Sample ID: E I Wall

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		14.1	%	1	11/15/2011 16:12	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.5		ND	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1221	NELAP	43.5		ND	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1232	NELAP	43.5		ND	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1242	NELAP	43.5		ND	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1248	NELAP	43.5		ND	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1254	NELAP	43.5		222	µg/Kg-dry	1	11/15/2011 23:56	72924
Aroclor 1260	NELAP	43.5		229	µg/Kg-dry	1	11/15/2011 23:56	72924
Surr: Decachlorobiphenyl		5-156		111.8	%REC	1	11/15/2011 23:56	72924
Surr: Tetrachloro-meta-xylene		7.35-123		65.3	%REC	1	11/15/2011 23:56	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-004

Client Sample ID: NE I W - East

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		12.3	%	1	11/15/2011 16:13	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1221	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1232	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1242	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1248	NELAP	42.7		ND	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1254	NELAP	42.7		62.6	µg/Kg-dry	1	11/15/2011 0:13	72924
Aroclor 1260	NELAP	42.7		67.9	µg/Kg-dry	1	11/15/2011 0:13	72924
Surr: Decachlorobiphenyl		5-156	S	190.8	%REC	1	11/15/2011 0:13	72924
Surr: Tetrachloro-meta-xylene		7.35-123		69.3	%REC	1	11/15/2011 0:13	72924
Surrogate recovery was outside QC limits due to matrix interference.								





## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-005

Client Sample ID: NW I W - West

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		11.0	%	1	11/15/2011 16:13	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	41.9		ND	µg/Kg-dry	1	11/15/2011 0:30	72924
Aroclor 1221	NELAP	41.9		ND	µg/Kg-dry	1	11/15/2011 0:30	72924
Aroclor 1232	NELAP	41.9		ND	µg/Kg-dry	1	11/15/2011 0:30	72924
Aroclor 1242	NELAP	41.9		ND	µg/Kg-dry	1	11/15/2011 0:30	72924
Aroclor 1248	NELAP	41.9		ND	µg/Kg-dry	1	11/15/2011 0:30	72924
Aroclor 1254	NELAP	210		851	µg/Kg-dry	5	11/16/2011 13:53	72924
Aroclor 1260	NELAP	41.9		458	µg/Kg-dry	1	11/15/2011 0:30	72924
Surr: Decachlorobiphenyl		5-156	S	350.6	%REC	1	11/15/2011 0:30	72924
Surr: Tetrachloro-meta-xylene		7.35-123		71.8	%REC	1	11/15/2011 0:30	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-006

Client Sample ID: W I Wall

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		10.9	%	1	11/15/2011 16:14	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1221	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1232	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1242	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1248	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1254	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Aroclor 1260	NELAP	41.6		ND	µg/Kg-dry	1	11/15/2011 0:47	72924
Surr: Decachlorobiphenyl		5-156	S	285.8	%REC	1	11/15/2011 0:47	72924
Surr: Tetrachloro-meta-xylene		7.35-123		67.6	%REC	1	11/15/2011 0:47	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-007

Client Sample ID: IBE-1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		10.5	%	1	11/15/2011 16:14	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1221	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1232	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1242	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1248	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1254	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Aroclor 1260	NELAP	41.7		ND	µg/Kg-dry	1	11/16/2011 1:04	72924
Surr: Decachlorobiphenyl		5-156		105.3	%REC	1	11/16/2011 1:04	72924
Surr: Tetrachloro-meta-xylene		7.35-123		76.9	%REC	1	11/16/2011 1:04	72924



## Laboratory Results

<http://www.teklabin.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-008

Client Sample ID: IBW-1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		15.1	%	1	11/15/2011 16:14	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1221	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1232	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1242	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1248	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1254	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Aroclor 1260	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 1:22	72924
Surr: Decachlorobiphenyl		5-156		93.9	%REC	1	11/16/2011 1:22	72924
Surr: Tetrachloro-meta-xylene		7.35-123		64.5	%REC	1	11/16/2011 1:22	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-009

Client Sample ID: SE BOT-1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		13.7	%	1	11/15/2011 16:15	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1221	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1232	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1242	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1248	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1254	NELAP	43.1		120	µg/Kg-dry	1	11/16/2011 1:39	72924
Aroclor 1260	NELAP	43.1		117	µg/Kg-dry	1	11/16/2011 1:39	72924
Surr: Decachlorobiphenyl		5-156		144.4	%REC	1	11/16/2011 1:39	72924
Surr: Tetrachloro-meta-xylene		7.35-123		73.1	%REC	1	11/16/2011 1:39	72924





## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-010

Client Sample ID: SC-BOT-1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		18.2	%	1	11/15/2011 16:15	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1221	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1232	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1242	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1248	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1254	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Aroclor 1260	NELAP	45.4		ND	µg/Kg-dry	1	11/16/2011 1:56	72924
Surr: Decachlorobiphenyl		5-156		96.3	%REC	1	11/16/2011 1:56	72924
Surr: Tetrachloro-meta-xylene		7.35-123		30.9	%REC	1	11/16/2011 1:56	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-011

Client Sample ID: NE BOT 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		11.0	%	1	11/15/2011 16:16	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1221	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1232	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1242	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1248	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1254	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Aroclor 1260	NELAP	42.1		ND	µg/Kg-dry	1	11/16/2011 2:13	72924
Surr: Decachlorobiphenyl		5-156		124.8	%REC	1	11/16/2011 2:13	72924
Surr: Tetrachloro-meta-xylene		7.35-123		67.4	%REC	1	11/16/2011 2:13	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-014

Client Sample ID: W/N Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		14.4	%	1	11/15/2011 16:17	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 3:39	72924
Aroclor 1221	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 3:39	72924
Aroclor 1232	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 3:39	72924
Aroclor 1242	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 3:39	72924
Aroclor 1248	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 3:39	72924
Aroclor 1254	NELAP	438		3580	µg/Kg-dry	10	11/16/2011 12:10	72924
Aroclor 1260	NELAP	438		3590	µg/Kg-dry	10	11/16/2011 12:10	72924
Surr: Decachlorobiphenyl		5-156	SE	827.0	%REC	1	11/16/2011 3:39	72924
Surr: Tetrachloro-meta-xylene		7.35-123		58.9	%REC	1	11/16/2011 3:39	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-015

Client Sample ID: E/S Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		15.9	%	1	11/15/2011 16:18	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 3:56	72924
Aroclor 1221	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 3:56	72924
Aroclor 1232	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 3:56	72924
Aroclor 1242	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 3:56	72924
Aroclor 1248	NELAP	44.1		ND	µg/Kg-dry	1	11/16/2011 3:56	72924
Aroclor 1254	NELAP	221		873	µg/Kg-dry	5	11/16/2011 12:27	72924
Aroclor 1260	NELAP	221		1080	µg/Kg-dry	5	11/16/2011 12:27	72924
Surr: Decachlorobiphenyl		5-156	SE	1857	%REC	1	11/16/2011 3:56	72924
Surr: Tetrachloro-meta-xylene		7.35-123		22.8	%REC	1	11/16/2011 3:56	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-016

Client Sample ID: E/N Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		15.1	%	1	11/15/2011 16:18	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	44.0		ND	µg/Kg-dry	1	11/16/2011 4:13	72924
Aroclor 1221	NELAP	44.0		ND	µg/Kg-dry	1	11/16/2011 4:13	72924
Aroclor 1232	NELAP	44.0		ND	µg/Kg-dry	1	11/16/2011 4:13	72924
Aroclor 1242	NELAP	44.0		ND	µg/Kg-dry	1	11/16/2011 4:13	72924
Aroclor 1248	NELAP	44.0		ND	µg/Kg-dry	1	11/16/2011 4:13	72924
Aroclor 1254	NELAP	440		1810	µg/Kg-dry	10	11/16/2011 12:44	72924
Aroclor 1260	NELAP	440		2040	µg/Kg-dry	10	11/16/2011 12:44	72924
Surr: Decachlorobiphenyl		5-156	SE	1180	%REC	1	11/16/2011 4:13	72924
Surr: Tetrachloro-meta-xylene		7.35-123		68.7	%REC	1	11/16/2011 4:13	72924
<i>Surrogate recovery was outside QC limits due to matrix interference.</i>								





## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-017

Client Sample ID: NW BOT 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		8.4	%	1	11/15/2011 16:18	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	40.5		ND	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1221	NELAP	40.5		ND	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1232	NELAP	40.5		ND	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1242	NELAP	40.5		ND	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1248	NELAP	40.5		ND	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1254	NELAP	40.5		158	µg/Kg-dry	1	11/16/2011 4:30	72924
Aroclor 1260	NELAP	40.5		162	µg/Kg-dry	1	11/16/2011 4:30	72924
Surr: Decachlorobiphenyl		5-156	S	657.6	%REC	1	11/16/2011 4:30	72924
Surr: Tetrachloro-meta-xylene		7.35-123		84.7	%REC	1	11/16/2011 4:30	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-018

Client Sample ID: SW-BOT 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		6.8	%	1	11/15/2011 16:19	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1221	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1232	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1242	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1248	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1254	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Aroclor 1260	NELAP	40.1		ND	µg/Kg-dry	1	11/16/2011 4:47	72924
Surr: Decachlorobiphenyl		5-156		144.6	%REC	1	11/16/2011 4:47	72924
Surr: Tetrachloro-meta-xylene		7.35-123		68.3	%REC	1	11/16/2011 4:47	72924



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-019

Client Sample ID: NC-Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		13.8	%	1	11/15/2011 16:19	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1221	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1232	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1242	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1248	NELAP	43.1		ND	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1254	NELAP	43.1		82.0	µg/Kg-dry	1	11/16/2011 5:05	72924
Aroclor 1260	NELAP	43.1		96.9	µg/Kg-dry	1	11/16/2011 5:05	72924
Surr: Decachlorobiphenyl		5-156	S	349.5	%REC	1	11/16/2011 5:05	72924
Surr: Tetrachloro-meta-xylene		7.35-123		42.9	%REC	1	11/16/2011 5:05	72924
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-020

Client Sample ID: NE Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		14.7	%	1	11/15/2011 16:20	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.7		ND	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1221	NELAP	43.7		ND	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1232	NELAP	43.7		ND	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1242	NELAP	43.7		ND	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1248	NELAP	43.7		ND	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1254	NELAP	43.7		494	µg/Kg-dry	1	11/16/2011 5:22	72924
Aroclor 1260	NELAP	43.7		635	µg/Kg-dry	1	11/16/2011 5:22	72924
Surr: Decachlorobiphenyl		5-156	S	0	%REC	1	11/16/2011 5:22	72924
Surr: Tetrachloro-meta-xylene		7.35-123		41.9	%REC	1	11/16/2011 5:22	72924
<i>Surrogate recovery was outside QC limits due to matrix interference.</i>								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-021

Client Sample ID: NW Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		16.1	%	1	11/15/2011 16:20	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	44.6		ND	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1221	NELAP	44.6		ND	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1232	NELAP	44.6		ND	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1242	NELAP	44.6		ND	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1248	NELAP	44.6		ND	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1254	NELAP	44.6		220	µg/Kg-dry	1	11/16/2011 6:13	72923
Aroclor 1260	NELAP	44.6		388	µg/Kg-dry	1	11/16/2011 6:13	72923
Surr: Decachlorobiphenyl		5-156	S	0	%REC	1	11/16/2011 6:13	72923
Surr: Tetrachloro-meta-xylene		7.35-123		73.8	%REC	1	11/16/2011 6:13	72923
<i>Surrogate recovery was outside QC limits due to matrix interference.</i>								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-022

Client Sample ID: SC Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		16.3	%	1	11/15/2011 16:20	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	44.8		ND	µg/Kg-dry	1	11/16/2011 7:04	72923
Aroclor 1221	NELAP	44.8		ND	µg/Kg-dry	1	11/16/2011 7:04	72923
Aroclor 1232	NELAP	44.8		ND	µg/Kg-dry	1	11/16/2011 7:04	72923
Aroclor 1242	NELAP	44.8		ND	µg/Kg-dry	1	11/16/2011 7:04	72923
Aroclor 1248	NELAP	44.8		ND	µg/Kg-dry	1	11/16/2011 7:04	72923
Aroclor 1254	NELAP	448		1840	µg/Kg-dry	10	11/16/2011 13:01	72923
Aroclor 1260	NELAP	448		3940	µg/Kg-dry	10	11/16/2011 13:01	72923
Surr: Decachlorobiphenyl		5-156	S	620.2	%REC	1	11/16/2011 7:04	72923
Surr: Tetrachloro-meta-xylene		7.35-123		26.3	%REC	1	11/16/2011 7:04	72923
<i>Surrogate recovery was outside QC limits due to matrix interference.</i>								





## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-023

Client Sample ID: SW Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		11.2	%	1	11/15/2011 16:21	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	41.8		ND	µg/Kg-dry	1	11/16/2011 7:22	72923
Aroclor 1221	NELAP	41.8		ND	µg/Kg-dry	1	11/16/2011 7:22	72923
Aroclor 1232	NELAP	41.8		ND	µg/Kg-dry	1	11/16/2011 7:22	72923
Aroclor 1242	NELAP	41.8		ND	µg/Kg-dry	1	11/16/2011 7:22	72923
Aroclor 1248	NELAP	41.8		ND	µg/Kg-dry	1	11/16/2011 7:22	72923
Aroclor 1254	NELAP	41.8		533	µg/Kg-dry	1	11/16/2011 13:19	72923
Aroclor 1260	NELAP	41.8		505	µg/Kg-dry	1	11/16/2011 7:22	72923
Surr: Decachlorobiphenyl		5-156	SE	959.8	%REC	1	11/16/2011 7:22	72923
Surr: Tetrachloro-meta-xylene		7.35-123		35.6	%REC	1	11/16/2011 7:22	72923
Surrogate recovery was outside QC limits due to matrix interference.								



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Lab ID: 11110662-024

Client Sample ID: SE Wall 1

Matrix: SOLID

Collection Date: 11/15/2011 0:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		14.6	%	1	11/15/2011 16:21	R156701
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD</b>								
Aroclor 1016	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 7:39	72923
Aroclor 1221	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 7:39	72923
Aroclor 1232	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 7:39	72923
Aroclor 1242	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 7:39	72923
Aroclor 1248	NELAP	43.8		ND	µg/Kg-dry	1	11/16/2011 7:39	72923
Aroclor 1254	NELAP	219		2220	µg/Kg-dry	5	11/16/2011 13:36	72923
Aroclor 1260	NELAP	219		1740	µg/Kg-dry	5	11/16/2011 13:36	72923
Surr: Decachlorobiphenyl		5-156	S	170.2	%REC	1	11/16/2011 7:39	72923
Surr: Tetrachloro-meta-xylene		7.35-123		26.9	%REC	1	11/16/2011 7:39	72923
Surrogate recovery was outside QC limits due to matrix interference.								



## Quality Control Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

### EPA SW846 3550C, 5035A, ASTM D2974

Batch R156701		SampType: LCS		Units %						
SampID: LCS-PMOIST										Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Percent Moisture	0.1		99.0	99.0	0	100	99.9	100.1	11/15/2011	

Batch R156701		SampType: LCSQC		Units %						
SampID: LCSQC-PMOIST										Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Analyzed	
Percent Moisture	0.1		99.0	99.0	0	100	99.9	100.1	11/15/2011	

Batch R156701		SampType: DUP		Units %				RPD Limit 15			
SampID: 11110662-012A DUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Percent Moisture		0.1		9.3				9.370	1.07	11/15/2011	

Batch R156701		SampType: DUP		Units %				RPD Limit 15			
SampID: 11110624-001A DUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Percent Moisture		0.1		30.0				29.01	3.36	11/15/2011	

Batch R156701		SampType: DUP		Units %				RPD Limit 15		
SampID: 11110626-001B DUP										
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Percent Moisture		0.1	R	17.3				14.45	18.18	11/15/2011

Batch R156701		SampType: DUP		Units %				RPD Limit 15		
SampID: 11110630-001A DUP										Date Analyzed
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	
Percent Moisture		0.1		93.7				93.61	0.05	11/15/2011

Batch R156701		SampType: DUP		Units %				RPD Limit 15			
SampID: 11110635-001A DUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Percent Moisture		0.1		85.8				85.77	0.09	11/15/2011	

Batch R156701		SampType: DUP		Units %				RPD Limit 15			
SampID: 11110647-001A DUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Percent Moisture		0.1		87.5				87.81	0.33	11/15/2011	

Batch R156701		SampType: DUP		Units %				RPD Limit 15			
SampID: 11110676-004A DUP										Date Analyzed	
Analyses		RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD		
Percent Moisture		0.1		13.3				13.62	2.08	11/15/2011	



## Quality Control Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

### SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 72923		SampType: MBLK		Units µg/Kg							
SampID: MB-72923											Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed	
Aroclor 1016	37.5		ND							11/16/2011	
Aroclor 1221	37.5		ND							11/16/2011	
Aroclor 1232	37.5		ND							11/16/2011	
Aroclor 1242	37.5		ND							11/16/2011	
Aroclor 1248	37.5		ND							11/16/2011	
Aroclor 1254	37.5		ND							11/16/2011	
Aroclor 1260	37.5		ND							11/16/2011	
Surr: Decachlorobiphenyl			8.8	8.3		105.6	59	160		11/16/2011	
Surr: Tetrachloro-meta-xylene			5.3	8.3		63.7	31.6	114		11/16/2011	

Batch 72923		SampType: LCS		Units µg/Kg						
SampID: LCSPCB-72923										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aroclor 1016	37.5		142	167	0	85.0	54.9	121	11/16/2011	
Aroclor 1260	37.5		173	167	0	103.7	65.5	133	11/16/2011	
Surr: Decachlorobiphenyl			8.6	8.3		103.2	86.4	159	11/16/2011	
Surr: Tetrachloro-meta-xylene			5.6	8.3		67.0	31.6	114	11/16/2011	

Batch 72923		SampType: MS		Units µg/Kg-dry						
SampID: 11110662-021AMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aroclor 1016	44.5		201	198	0	101.7	35.8	143	11/16/2011	
Aroclor 1260	44.5		564	198	388.0	89.2	22.3	152	11/16/2011	
Surr: Decachlorobiphenyl		S	0	9.8		0	5	156	11/16/2011	
Surr: Tetrachloro-meta-xylene			7.7	9.8		78.7	7.35	123	11/16/2011	

Batch 72923		SampType: MSD		Units µg/Kg-dry				RPD Limit 40			
SampID: 11110662-021AMSD										Date Analyzed	
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD			
Aroclor 1016	44.4		174	197	0	88.2	201.1	14.45	11/16/2011		
Aroclor 1260	44.4		489	197	388.0	51.2	564.4	14.32	11/16/2011		
Surr: Decachlorobiphenyl		S	0	9.8		0			11/16/2011		
Surr: Tetrachloro-meta-xylene			7.1	9.8		72.2			11/16/2011		



## Quality Control Results

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

### SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 72924		SampType: MBLK		Units µg/Kg								
SampID: MB-72924												Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit		Analyzed		
Aroclor 1016	37.5		ND							11/15/2011		
Aroclor 1221	37.5		ND							11/15/2011		
Aroclor 1232	37.5		ND							11/15/2011		
Aroclor 1242	37.5		ND							11/15/2011		
Aroclor 1248	37.5		ND							11/15/2011		
Aroclor 1254	37.5		ND							11/15/2011		
Aroclor 1260	37.5		ND							11/15/2011		
Surr: Decachlorobiphenyl			8.4	8.3		101.6	59	160		11/15/2011		
Surr: Tetrachloro-meta-xylene			5.5	8.3		66.3	31.6	114		11/15/2011		

Batch 72924		SampType: LCS		Units µg/Kg						
SampID: LCSPCB-72924										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aroclor 1016	37.5		132	167	0	79.0	54.9	121	11/15/2011	
Aroclor 1260	37.5		167	167	0	100.2	65.5	133	11/15/2011	
Surr: Decachlorobiphenyl			8.0	8.3		96.8	86.4	159	11/15/2011	
Surr: Tetrachloro-meta-xylene			5.0	8.3		60.7	31.6	114	11/15/2011	

Batch 72924		SampType: MS		Units µg/Kg-dry						
SampID: 11110662-001AMS										
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Aroclor 1016	41.6		191	185	0	103.2	35.8	143	11/15/2011	
Aroclor 1260	41.6		231	185	0	124.8	22.3	152	11/15/2011	
Surr: Decachlorobiphenyl			9.0	9.2		97.7	5	156	11/15/2011	
Surr: Tetrachloro-meta-xylene			7.2	9.2		78.5	7.35	123	11/15/2011	

Batch 72924		SampType: MSD		Units µg/Kg-dry				RPD Limit 40		
SampID: 11110662-001AMSD										Date
Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Analyzed	
Aroclor 1016	42.0		175	187	0	93.6	190.9	8.88	11/15/2011	
Aroclor 1260	42.0		217	187	0	116.1	230.9	6.36	11/15/2011	
Surr: Decachlorobiphenyl			10	9.3		107.9			11/15/2011	
Surr: Tetrachloro-meta-xylene			6.7	9.3		72.1			11/15/2011	



## Receiving Check List

<http://www.teklabinc.com/>

Client: AMEC Environment & Infrastructure, Inc.

Work Order: 11110662

Client Project: AMEC 3250115533-3

Report Date: 16-Nov-11

Carrier: Dale Markely

Received By: MLD

Completed by:

On:

15-Nov-11

Timothy W. Mathis

Reviewed by:

On:

16-Nov-11

Elizabeth A. Hurley

Pages to follow: Chain of custody

3

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 19.4

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☐

No ☒

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Any No responses must be detailed below or on the COC.

The samples were out of temperature compliance upon receipt. Per Dale Markley, continue with analysis out of temperature compliance. MLDII  
11/15/11

pg. 1 of 3 Work Order # 111106662

**TEKLAB, INC.** 5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client: AMEC  
Address: 3199 Riverport Pkwy, DR  
City / State / Zip: St. Louis, MO  
Contact: Dale Markley Phone: 314 971-6555  
E-Mail: dale.markley@amec.com Fax: \_\_\_\_\_

Are these samples known to be involved in litigation? If yes, a surcharge will apply. ☐ Yes ☒ No

Are these samples known to be hazardous? ☒ Yes ☐ No

Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in comment section. ☒ Yes ☐ No *100m PCB*

Project Name / Number		Sample Collector's Name	
Anee 3250115533-3		Dale Markley	
Results Requested		Billing Instructions	
<input type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input checked="" type="checkbox"/> Other <u>24hr</u> <input type="checkbox"/> 3 Day (50% Surcharge)		Anee 301	
Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers
001	SWI wall	11/15/11	UNPRES ✓
002	SE I wall	↓	1
003	E I wall		1
004	NE I W - East		1
005	NW I W - West		1
006	W I wall		1
007	I BE-1	↓	1
008	I BW-1		1
009	SE BOT-1		1
010	SC - BOT-1	↓	1

Relinquished By	Date / Time
<i>Debra E. Wray</i>	<i>11/15/11</i>

Samples on: ☒ Ice ☐ Blue Ice ☒ No Ice 19-7-00  
Preserved in: ☒ Lab ☐ Field FOR LAB USE ONLY  
Lab Notes: 0% cont of temp per Data Machinery MIDD GRA 11/15/11  
Comments: One Day TAT

[illegible]

The individual signing this agreement on behalf of client acknowledges that he/she has read and understands the terms and conditions of this agreement, on the reverse side, and that he/she has the authority to sign on behalf of client.

**WHITE & YELLOW - LAB PINK - SAMPLER'S COPY**



# CHAIN OF CUSTODY

pg. 2 of 3 Work Order # 111D662

TEKLAB, INC. 5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client: AMEC  
 Address: \_\_\_\_\_  
 City / State / Zip: ST LOUIS  
 Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
 E-Mail: dalo.markley@amec.com Fax: \_\_\_\_\_

- Are these samples known to be involved in litigation? If yes, a surcharge will apply. ☐ Yes ☐ No
- Are these samples known to be hazardous? ☐ Yes ☐ No
- Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in comment section. ☐ Yes ☐ No

Samples on: ☐ Ice ☐ Blue Ice ☐ No Ice ☐ °C  
 Preserved in: ☐ Lab ☐ Field ☐ FOR LAB USE ONLY  
 Lab Notes: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
**One Day TAT**

Project Name / Number		Sample Collector's Name		INDICATE ANALYSIS REQUESTED									
3250115533-3		Dale E Markley											
Results Requested		Billing Instructions		# and Type of Containers									
<input type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input checked="" type="checkbox"/> Other <u>24 hr</u> <input type="checkbox"/> 3 Day (50% Surcharge)		Amecpo											
Lab Use Only	Sample Identification	Date/Time Sampled	Water	Drinking Water	Soil	Sludge	Sp. Waste						
001	NE BOT 1	11/15/11											
002	NC BOT 1												
003	W/S wall 1												
004	W/N wall 1												
005	E/S wall 1												
006	E/N wall 1												
007	NW BOT 1												
008	SW - BOT 1												
009	NC-wall 1												
020	NE wall 1												

Relinquished By: Dale E Markley Date / Time: 11/15/11  
 Received By: Mervin D. Dalglish Date / Time: 11/15/11 1357

The individual signing this agreement on behalf of client acknowledges that he/she has read and understands the terms and conditions of this agreement, on the reverse side, and that he/she has the authority to sign on behalf of client.

WHITE & YELLOW - LAB PINK - SAMPLER'S COPY

pg. 5 of 2 Work Order # 1110402

**TEKLAB, INC.**  
5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client: AMEC  
Address: \_\_\_\_\_  
City / State / Zip: ST LOUIS  
Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
E-Mail: \_\_\_\_\_ Fax: \_\_\_\_\_

Samples on: <input type="checkbox"/> Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> No Ice	°C _____
Preserved in: <input type="checkbox"/> Lab <input type="checkbox"/> Field	<u>FOR LAB USE ONLY</u>
Lab Notes:	
Comments:	
	<b>One Day TAT</b>

• Are these samples known to be involved in litigation? If yes, a surcharge will apply. ☐ Yes ☐ No

• Are these samples known to be hazardous? ☐ Yes ☐ No

• Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in comment section. ☐ Yes ☐ No

[illegible]

**WHITE & YELLOW - LAB    PINK - SAMPLER'S COPY**



## **Appendix F**

### **Backfill Analytical Laboratory Results**



October 12, 2011

Dale E. Markley

AMEC

3199 Riverport Tech Center Drive

St. Louis, MO 63043

TEL: (314) 209-5943

FAX: (314) 209-5929



**RE:** ACF E. St. Louis/AMEC#3250115533-03

**WorkOrder:** 11100235

Dear Dale E. Markley:

TEKLAB, INC received 1 sample on 10/6/2011 1:03:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Marvin L. Darling

Project Manager

(618)344-1004 ex 41

[mdarling@teklabinc.com](mailto:mdarling@teklabinc.com)



## Definitions

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

### Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCS D Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TNTC Too numerous to count ( > 200 CFU )

### Qualifiers

- |  |  |
|--|--|
| # - Unknown hydrocarbon                        | B - Analyte detected in associated Method Blank        |
| E - Value above quantitation range             | H - Holding times exceeded                             |
| J - Analyte detected below quantitation limits | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit       | R - RPD outside accepted recovery limits               |
| S - Spike Recovery outside recovery limits     | X - Value exceeds Maximum Contaminant Level            |





## Case Narrative

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

Cooler Receipt Temp: 16.0 °C

### Locations and Accreditations

Collinsville		Springfield		Kansas City	
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	Address	3920 Pintail Dr Springfield, IL 62711-9415	Address	8421 Nieman Road Lenexa, KS 66214
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998
Email	jhriley@teklabinc.com	Email	kmcclain@teklabinc.com	Email	dthompson@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2012	Collinsville
Kansas	KDHE	E-10374	NELAP	1/31/2012	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2012	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2012	Springfield
Arkansas	ADEQ	88-0966		3/14/2012	Collinsville
Illinois	IDPH	17584		4/30/2012	Collinsville
Kentucky	UST	0073		5/26/2012	Collinsville
Missouri	MDNR	00930		4/13/2013	Collinsville
Oklahoma	ODEQ	9978		8/31/2012	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

Lab ID: 11100235-001

Client Sample ID: Backfill-1

Matrix: SOLID

Collection Date: 10/06/2011 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>EPA SW846 3550C, 5035A, ASTM D2974</b>								
Percent Moisture		0.1		1.5	%	1	10/07/2011 10:27	R155212
<b>SW-846 3050B, 6010B, METALS BY ICP</b>								
Aluminum	NELAP	24.0		731	mg/Kg-dry	5	10/11/2011 11:07	71851
Antimony	NELAP	4.90		< 4.90	mg/Kg-dry	1	10/10/2011 23:26	71871
Arsenic	NELAP	2.40		< 2.40	mg/Kg-dry	1	10/10/2011 16:55	71851
Barium	NELAP	2.40		76.6	mg/Kg-dry	5	10/11/2011 11:07	71851
Beryllium	NELAP	0.10		< 0.10	mg/Kg-dry	1	10/10/2011 16:55	71851
Cadmium	NELAP	0.19		0.19	mg/Kg-dry	1	10/10/2011 16:55	71851
Calcium	NELAP	481		372000	mg/Kg-dry	100	10/11/2011 14:06	71851
Chromium	NELAP	4.81		7.88	mg/Kg-dry	5	10/11/2011 11:07	71851
Cobalt	NELAP	0.96		< 0.96	mg/Kg-dry	1	10/10/2011 16:55	71851
Copper	NELAP	0.96		< 0.96	mg/Kg-dry	1	10/10/2011 16:55	71851
Iron	NELAP	9.62		1260	mg/Kg-dry	5	10/11/2011 11:07	71851
Lead	NELAP	3.85		< 3.85	mg/Kg-dry	1	10/10/2011 16:55	71851
Magnesium	NELAP	4.81		19700	mg/Kg-dry	5	10/11/2011 11:07	71851
Manganese	NELAP	2.40		75.1	mg/Kg-dry	5	10/11/2011 11:07	71851
Nickel	NELAP	4.81	J	4.5	mg/Kg-dry	5	10/11/2011 11:07	71851
Potassium	NELAP	48.1		358	mg/Kg-dry	5	10/11/2011 11:07	71851
Selenium	NELAP	3.85		< 3.85	mg/Kg-dry	1	10/10/2011 16:55	71851
Silver	NELAP	0.53		< 0.53	mg/Kg-dry	1	10/10/2011 16:55	71851
Sodium	NELAP	24.0		103	mg/Kg-dry	5	10/11/2011 11:07	71851
Thallium	NELAP	4.81	J	2.4	mg/Kg-dry	1	10/10/2011 16:55	71851
Vanadium	NELAP	4.81		9.57	mg/Kg-dry	5	10/11/2011 11:07	71851
Zinc	NELAP	4.81		20.8	mg/Kg-dry	5	10/11/2011 11:07	71851
<b>SW-846 7471A</b>								
Mercury	NELAP	0.010		< 0.010	mg/Kg-dry	1	10/11/2011 10:30	71901
<b>SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/EC</b>								
Aroclor 1016	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1221	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1232	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1242	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1248	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1254	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Aroclor 1260	NELAP	37.9		ND	µg/Kg-dry	1	10/07/2011 11:54	71795
Surr: Decachlorobiphenyl		5-156		109.8	%REC	1	10/07/2011 11:54	71795
Surr: Tetrachloro-meta-xylene		7.35-123		58.8	%REC	1	10/07/2011 11:54	71795
<b>SW-846 3550B, 8270C SIMS, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Acenaphthene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Acenaphthylene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Anthracene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Benzo(a)anthracene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Benzo(a)pyrene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Benzo(b)fluoranthene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Benzo(g,h,i)perylene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Benzo(k)fluoranthene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Chrysene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Dibenzo(a,h)anthracene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843

**Client:** AMEC

**Work Order:** 11100235

**Client Project:** ACF E. St. Louis/AMEC#3250115533-03

**Report Date:** 12-Oct-11

**Lab ID:** 11100235-001

**Client Sample ID:** Backfill-1

**Matrix:** SOLID

**Collection Date:** 10/06/2011 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 3550B, 8270C SIMS, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Fluoranthene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Fluorene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Indeno(1,2,3-cd)pyrene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Naphthalene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Phenanthrene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Pyrene	NELAP	0.003		ND	mg/Kg-dry	1	10/07/2011 15:19	71843
Surr: 2-Fluorobiphenyl		10-131		67.1	%REC	1	10/07/2011 15:19	71843
Surr: Nitrobenzene-d5		10-132		69.1	%REC	1	10/07/2011 15:19	71843
Surr: p-Terphenyl-d14		80.2-138	S	78.2	%REC	1	10/07/2011 15:19	71843

*Surrogate recovery was outside QC limits due to matrix interference.*
**SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS**

1,1,1,2-Tetrachloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1,1-Trichloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1,2,2-Tetrachloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1,2-Trichloro-1,2,2-trifluoroethane		5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1,2-Trichloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1-Dichloro-2-propanone		52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1-Dichloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1-Dichloroethene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,1-Dichloropropene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2,3-Trichlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2,3-Trichloropropane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2,3-Trimethylbenzene		5.3	J	1.3	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2,4-Trichlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2,4-Trimethylbenzene	NELAP	5.3	J	5.1	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2-Dibromo-3-chloropropane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2-Dibromoethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2-Dichlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2-Dichloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,2-Dichloropropane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,3,5-Trimethylbenzene	NELAP	5.3	J	2.2	µg/Kg-dry	1	10/11/2011 11:16	71907
1,3-Dichlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,3-Dichloropropane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1,4-Dichlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
1-Chlorobutane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
2,2-Dichloropropane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
2-Butanone	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
2-Chlorotoluene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
2-Hexanone	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
2-Nitropropane	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
4-Chlorotoluene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
4-Methyl-2-pentanone	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Acetone	NELAP	52.8	J	12	µg/Kg-dry	1	10/11/2011 11:16	71907
Acrolein	NELAP	106		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Acrylonitrile	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Allyl chloride	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Benzene	NELAP	1.1		1.5	µg/Kg-dry	1	10/11/2011 11:16	71907



# Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

Lab ID: 11100235-001

Client Sample ID: Backfill-1

Matrix: SOLID

Collection Date: 10/06/2011 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
Bromobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Bromochloromethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Bromodichloromethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Bromoform	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Bromomethane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Carbon disulfide	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Carbon tetrachloride	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Chlorobenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Chloroethane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Chloroform	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Chloromethane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
cis-1,2-Dichloroethene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
cis-1,3-Dichloropropene	NELAP	4.2		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Cyclohexanone		106		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Dibromochloromethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Dibromomethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Dichlorodifluoromethane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Ethyl acetate	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Ethyl ether	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Ethyl methacrylate	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Ethylbenzene	NELAP	5.3	J	2.4	µg/Kg-dry	1	10/11/2011 11:16	71907
Heptane		21.1	J	4.3	µg/Kg-dry	1	10/11/2011 11:16	71907
Hexachlorobutadiene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Hexachloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Iodomethane	NELAP	10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Isopropylbenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
m,p-Xylenes	NELAP	5.3		6.1	µg/Kg-dry	1	10/11/2011 11:16	71907
Methacrylonitrile	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Methyl Methacrylate	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Methyl tert-butyl ether	NELAP	2.1		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Methylacrylate		10.6		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Methylene chloride	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Naphthalene	NELAP	10.6	J	4.1	µg/Kg-dry	1	10/11/2011 11:16	71907
n-Butylbenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
n-Hexane		21.1	J	5.8	µg/Kg-dry	1	10/11/2011 11:16	71907
Nitrobenzene	NELAP	106		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
n-Propylbenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
o-Xylene	NELAP	5.3	J	2.0	µg/Kg-dry	1	10/11/2011 11:16	71907
Pentachloroethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
p-Isopropyltoluene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Propionitrile	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
sec-Butylbenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Styrene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
tert-Butylbenzene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Tetrachloroethene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Tetrahydrofuran	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Toluene	NELAP	5.3	J	4.5	µg/Kg-dry	1	10/11/2011 11:16	71907



## Laboratory Results

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

Lab ID: 11100235-001

Client Sample ID: Backfill-1

Matrix: SOLID

Collection Date: 10/06/2011 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
trans-1,2-Dichloroethene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
trans-1,3-Dichloropropene	NELAP	4.2		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Trichloroethene	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Trichlorofluoromethane	NELAP	5.3		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Vinyl acetate	NELAP	52.8		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Vinyl chloride	NELAP	2.1		ND	µg/Kg-dry	1	10/11/2011 11:16	71907
Surr: 1,2-Dichloroethane-d4		72.2-131		92.8	%REC	1	10/11/2011 11:16	71907
Surr: 4-Bromofluorobenzene		82.1-116		101.1	%REC	1	10/11/2011 11:16	71907
Surr: Dibromofluoromethane		77.7-120		104.8	%REC	1	10/11/2011 11:16	71907
Surr: Toluene-d8		86-116		89.9	%REC	1	10/11/2011 11:16	71907



## Receiving Check List

<http://www.teklabinc.com/>

Client: AMEC

Work Order: 11100235

Client Project: ACF E. St. Louis/AMEC#3250115533-03

Report Date: 12-Oct-11

Carrier: Employee

Received By: BSI

Completed by:

On:

06-Oct-11

Timothy W. Mathis

Reviewed by:

On:

06-Oct-11

Marvin L. Darling II

Marvin L. Darling

Pages to follow: Chain of custody

1

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C 16.0

Type of thermal preservation?

None ☐

Ice ☒

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - vials have zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

Any No responses must be detailed below or on the COC.



# Chain of Custody Record

210 West Sand Bank Road  
Columbia, IL 62236

(618) 281-7173 Phone  
(618) 281-7020 Fax

11100235  
COC Serial No. 11438 OF

DALE

Project Name: ACF E. ST. LOUIS Project Mgr.: MARKLEY

Project Number: 3250115533-03 Cost Code:

Sampler(s): BLANTON

Laboratory Name: TEKLAB

Location: COLLINSVILLE, IL.

Sample ID (depth):

Date: 10/6/11 Time: 12:30

BACKFILL - 1

Matrix	Total Number of Containers				
	Soil	Water	Air	Wipes	Other *
PCBs - EPA 8082	X				
PAHs	X				
VOCs	X				
TA.L METALS	X				

Analyses by Method Name and Number

MS/MSD	Lab ID #'s
	1100235-01

Laboratory Temperature upon Receipt  
16.0

Comments (Field PID)

Lab ID #'s

NOTE: PSC COLLECTED SAMPLE AS AGENT FOR AMEC.

PLEASE BILL AMEC FOR ANALYSIS

ATTN: DALE MARKLEY OFFICE 314-209-5943

AMEC

3199 RIVERPORT TECH CENTER DL

ST LOUIS, MO. 63043

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Samples Used: ☒ Yes ☐ No

- Preservatives
- ☐ Volatile Organics ..... Hydrochloric acid (HCl)
  - ☐ VOC Soil (5035) ..... Sodium Bisulfate/Methanol
  - ☐ TPH ..... Hydrochloric acid and/or Sulfuric acid
  - ☐ Metals ..... Nitric acid (HNO<sub>3</sub>)
  - ☐ Cyanide ..... Sodium hydroxide (NaOH)
  - ☐ Other (Specify) .....

Lab Directives:

- Requested TAT: ☐ 24-Hour ☒ 2-3 Days ☐ Other
- E-mail and/or Mail Results to: DALE MARKLEY OF AMEC (DALE.MARKLEY@AMEC.COM)
- Send Invoice to: DALE MARKLEY 3199 RIVERPORT TECH CENTER DRIVE, ST. LOUIS, MO 63043
- QC Deliverable Requested: ☐ Full QC & Limits ☐ CLP-LIKE ☒ EDD ☒ Other STANDARD
- Special Guidelines:
- Reporting Limits:
- \* Special: PSC COLLECTING SAMPLES AS AGENT FOR AMEC - BILL AMEC!

Shipping:

Carrier / Airbill No.

Relinquished by:

Signature: [Signature]

Date: 10/6/11

Time: 1303

Received by:

Signature: [Signature]

Date: 10/6/11

Time: 1303

Distribution: WHITE to Lab CANARY to PM  
PE-178 (9/10)

Shaded Areas to be Completed by Lab







035  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

OCT 13 2011

REPLY TO THE ATTENTION OF:  
LU-9J

CERTIFIED MAIL: 7001 0320 0006 1565 6172  
RETURNED RECEIPT REQUEST

Mr. Rich Hyink  
ACF Industries, LLC  
101 Clark Street  
St. Charles, Missouri 63301-2075

RE: Self-Implementing PCB Cleanup Application  
Former ACF Site  
ILD 006 273 809  
100 Trendley Avenue  
East St. Louis, Illinois 62201

Dear Mr. Hyink:

The U.S. Environmental Protection Agency has completed its review of the September 12, 2011, notification and certification that you intend to conduct a self-implementing cleanup and disposal of Polychlorinated Biphenyl (PCB) remediation waste in accordance with the requirements of 40 Code of Federal Regulations (CFR) §761.61(a).

The cleanup site is a 15 foot by 23 foot area on a 19.9-acre, vacant former industrial property. Soil testing and remediation activities were reportedly performed at the property in 1982 and 1991; however, additional PCB impacts exceeding 50 parts per million (ppm) were identified at the cleanup site during soil testing completed in 2010 and 2011, and are the subject of this self-implementing cleanup. The recent and available historical information was submitted to the Illinois Environmental Protection Agency with the intention of pursuing a Comprehensive No Further Remediation Letter for the subject property.

The site's geologic profile includes urban fill overlying 60 to 75 feet of alluvial silt, sand, and gravel followed by coarse sand and gravel to a depth of 100 to 120 feet below ground surface. Below the coarse alluvium, limestone and dolomite bedrock is present. PCB impacts were delineated within the upper 7 to 11 feet of fill and native soil materials. One monitoring well and eight piezometers have been installed on the subject property, although the locations, results, and depth to water are not discussed.

The subject property is currently vacant and was previously used for the cleaning, repair, blasting, and painting of tank and covered hopper railcars. A prospective purchaser

intends to use the site as a parking lot and Illinois Department of Transportation highway extension. The cleanup site will be remediated to a low-occupancy PCB objective of 50 part per million (ppm) in accordance with 40 CFR § 761.61(a)(4). The cleanup plan anticipates that residual PCBs will be capped where concentrations exceed 1 part per million.

Based on the information provided, PCB impacts were identified at a maximum concentration of 173 ppm at the site. Excavated soils are PCB Remediation Waste and will be disposed of at a RCRA Subtitle C hazardous waste landfill in accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(iii), pending approval from the landfill. It has been proposed that a total of 15 discrete confirmation samples will be collected from the excavation sidewalls and base, and comments regarding this proposed sampling scenario are provided in the attachment that follows.


Based on our review, your notification is hereby approved, subject to the following conditions:

1. As stated in 40 CFR 761.61(a), you must conduct the cleanup in accordance with all applicable requirements of 40 CFR 761.61(a)(1) through (9). A copy of those requirements is enclosed for your convenience. To assist you in completing the cleanup successfully, we have placed an "X" in the margin to identify specific requirements for which your notice is deficient in describing how you plan to comply. Specific comments about each of the deficient areas are noted in bold italics following the regulatory citation.
2. You must prepare a cleanup completion summary report that describes how you conducted the PCB cleanup in accordance with the applicable regulatory requirements, including those marked with an "X" on the enclosure. You must send a copy to Joseph Kelly, Corrective Action Project Manager with Corrective Action Section 1, Remediation and Reuse Branch, Land and Chemicals Division of Region 5 US EPA (77 West Jackson Boulevard, Mail Code LU-9J, Chicago, Illinois 60604-3590) within 60 days after completion of the cleanup.
3. If your cleanup activity includes the use of a fence or a cap that must be maintained in perpetuity, or if any portion of the site is cleaned up to the levels appropriate for low occupancy areas, then you must notify us thirty days prior to any change in ownership of the property. Such notice must include the name, address and telephone number of the new owner, and the name of the new owner's contact person for this matter. You must also submit a letter, signed by the potential purchaser, stating whether it intends to maintain the fence or cap, and whether it plans to maintain the low occupancy land use, or whether it intends to remove and dispose of additional PCB-contaminated soils off-site instead.

Please note that this approval does not relieve you from your duty to comply with all other applicable federal, state, and local requirements. In addition, please note that if you

cc: Todd Gross  
Illinois Environmental Protection Agency

Dale Markley  
AMEC

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		A. Received by (Please Print Clearly) _____ B. Date of Delivery <u>10-18</u>	
Article Addressed to: _____		C. Signature <u>X Sarah Davis</u> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
<div style="border: 1px solid black; padding: 5px; text-align: center;">   Mr. Rich Hyink  ACF Industries, LLC  101 Clark Street  St. Charles, Missouri 63301-2075 </div>		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Copy from service label) _____		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
PS Form 3811, July 1999		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
Domestic Return Receipt		7001 0320 0006 1565 6189	
102595-99-M-1789			

bcc: Joseph Kelly  
US EPA Region 5

Peter Ramanauskas  
US EPA Region 5

## ENCLOSURE

### Regulatory Requirements of 40 CFR 761.61(a)

Please note that an "X" in the margin [ ] indicates that the notification and certification of your intention to conduct a self-implementing cleanup does not adequately explain how you intend to comply with the regulatory requirement.

[ ] (1) **Applicability**

(i) The self-implementing procedures may not be used to clean up:

- (A) Surface or ground waters.
- (B) Sediments in marine and freshwater ecosystems.
- (C) Sewers or sewage treatment systems.
- (D) Any private or public drinking water sources or distribution systems.
- (E) Grazing lands.
- (F) Vegetable gardens.

[ ] (ii) The self-implementing cleanup provisions shall not be binding upon cleanups conducted under other authorities, including but not limited to, actions conducted under section 104 or section 106 of CERCLA, or section 3004(u) and (v) or section 3008(h) of RCRA.

[X] (2) **Site characterization.** Any person conducting self-implementing cleanup of PCB remediation waste must characterize the site adequately to be able to provide the information required by paragraph (a)(3) of this section. Subpart N of this part provides a method for collecting new site characterization data or for assessing the sufficiency of existing site characterization data.

*Characterization for the cleanup site is sufficient for purposes of implementing cleanup in the 345 square foot area where PCBs exceed 50 ppm, provided that verification sampling complies with 40 CFR 761 Subpart O. Characterization for the remainder of the 19.9-acre property does not meet the requirements of §761, and this approval does not pertain to the remainder of the site.*

[ ] (3) **Notification and certification.**

[X] (i) At least 30 days prior to the date that the cleanup of a site begins, the person in charge of the cleanup or the owner of the property where the PCB remediation waste is located shall notify, in writing, the EPA Regional Administrator, the Director of the State or Tribal environmental protection agency, and the Director of the county or local environmental protection agency where the cleanup will be conducted. The notice shall include:

*Please provide notification to State and local environmental agencies at least 30 days prior to initiating cleanup, or request a waiver of the 30-day notification pursuant to §761.61(a)(3)(iii).*

[ ] (A) The nature of the contamination, including kinds of materials contaminated.

- [ ] (B) A summary of the procedures used to sample contaminated and adjacent areas and a table or cleanup site map showing PCB concentrations measured in all pre-cleanup characterization samples. The summary must include sample collection and analysis dates. The EPA Regional Administrator may require more detailed information including, but not limited to, additional characterization sampling or all sample identification numbers from all previous characterization activities at the cleanup site.
- [ ] (C) The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross referenced to the sample identification numbers in the data summary from paragraph (a)(3)(i)(B) of this section.
- [ ] (D) A cleanup plan for the site, including schedule, disposal technology, and approach. This plan should contain options and contingencies to be used if unanticipated higher concentrations or wider distributions of PCB remediation waste are found or other obstacles force changes in the cleanup approach.
- [ ] (E) A written certification, signed by the owner of the property where the cleanup site is located and the party conducting the cleanup, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection. Persons using alternate methods for chemical extraction and chemical analysis for site characterization must include in the certificate a statement that such a method will be used and that a comparison study which meets or exceeds the requirements of subpart Q of this part, and for which records are on file, has been completed prior to verification sampling.
- [ ] (ii) Within 30 calendar days of receiving the notification, the EPA Regional Administrator will respond in writing approving of the self-implementing cleanup, disapproving of the self-implementing cleanup, or requiring additional information. If the EPA Regional Administrator does not respond within 30 calendar days of receiving the notice, the person submitting the notification may assume that it is complete and acceptable and proceed with the cleanup according to the information the person provided to the EPA Regional Administrator. Once cleanup is underway, the person conducting the cleanup must provide any proposed changes from the notification to the EPA Regional Administrator in writing no less than 14 calendar days prior to the proposed implementation of the change. The EPA Regional Administrator will determine in his or her discretion whether to accept the change, and will respond to the change notification verbally within 7 calendar days and in writing within 14 calendar days of receiving it. If the EPA Regional Administrator does not respond verbally within 7 calendar days and in writing within 14 calendar days of receiving the change notice, the person who submitted it may deem it



complete and acceptable and proceed with the cleanup according to the information in the change notice provided to the EPA Regional Administrator.

- [ ] (iii) Any person conducting a cleanup activity may obtain a waiver of the 30-day notification requirement, if they receive a separate waiver, in writing, from each of the agencies they are required to notify under this section. The person must retain the original written waiver as required in paragraph (a)(9) of this section.

- [ ] (4) **Cleanup levels.** For purposes of cleaning, decontaminating, or removing PCB remediation waste under this section, there are four general waste categories: bulk PCB remediation waste, non-porous surfaces, porous surfaces, and liquids. Cleanup levels are based on the kind of material and the potential exposure to PCBs left after cleanup is completed.

- [ ] (i) **Bulk PCB remediation waste.** Bulk PCB remediation waste includes, but is not limited to, the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge.

- [ ] (A) **High occupancy areas.** The cleanup level for bulk PCB remediation waste in high occupancy areas is  $\leq 1$  ppm without further conditions. High occupancy areas where bulk PCB remediation waste remains at concentrations  $> 1$  ppm and  $\leq 10$  ppm shall be covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

- [ ] (B) **Low occupancy areas.**

- [ ] (1) The cleanup level for bulk PCB remediation waste in low occupancy areas is  $\leq 25$  ppm unless otherwise specified in this paragraph.

- [X] (2) Bulk PCB remediation wastes may remain at a cleanup site at concentrations  $> 25$  ppm and  $\leq 50$  ppm if the site is secured by a fence and marked with a sign including the  $M_L$  mark.

***The proposed remediation objective is 50 ppm. Areas of residual PCB contamination  $> 10$  ppm and  $\leq 25$  ppm that remain following cleanup must be designated as low occupancy areas. Depending the future use of the subject property, areas of residual PCB contamination  $> 25$  ppm and  $< 50$  ppm that remain following cleanup must also either be secured by a fence and marked with a sign including the  $M_L$  mark, or covered with a cap meeting the requirements of paragraphs §761.61(a)(7) and §761.61(a)(8).***

- [X] (3) Bulk PCB remediation wastes may remain at a cleanup site at concentrations  $> 25$  ppm and  $\leq 100$  ppm if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

***The proposed remediation objective is 50 ppm. Areas of residual PCB contamination > 10 ppm and ≤25 ppm that remain following cleanup must be designated as low occupancy areas. Depending the future use of the subject property, areas of residual PCB contamination > 25 ppm and < 50 ppm that remain following cleanup must also either be secured by a fence and marked with a sign including the M<sub>L</sub> mark, or covered with a cap meeting the requirements of paragraphs §761.61(a)(7) and §761.61(a)(8).***

[ ] (ii) *Non-porous surfaces.* In high occupancy areas, the surface PCB cleanup standard is ≤ 10 µg/100 cm<sup>2</sup> of surface area. In low occupancy areas, the surface cleanup standard is <100 µg/100 cm<sup>2</sup> of surface area. Select sampling locations in accordance with subpart P of this part or a sampling plan approved under paragraph (c) of this section.

[ ] (iii) *Porous surfaces.* In both high and low occupancy areas, any person disposing of porous surfaces must do so based on the levels in paragraph (a)(4)(i) of this section. Porous surfaces may be cleaned up for use in accordance with §761.79(b)(4) or §761.30(p).

[ ] (iv) *Liquids.* In both high and low occupancy areas, cleanup levels are the concentrations specified in §761.79(b)(1) and (b)(2).

[X] (v) *Change in the land use for a cleanup site.* Where there is an actual or proposed change in use of an area cleaned up to the levels of a low occupancy area, and the exposure of people or animal life in or at that area could reasonably be expected to increase, resulting in a change in status from a low occupancy area to a high occupancy area, the owner of the area shall clean up the area in accordance with the high occupancy area cleanup levels in paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

***Since the future redevelopment plans remain uncertain, site occupancy cannot exceed an average of 6.7 hours per week if the low occupancy objectives are utilized unless further information is provided to demonstrate the cleanup objectives for high occupancy use have been met, and/or appropriate controls/caps are in place.***

[ ] (vi) The EPA Regional Administrator, as part of his or her response to a notification submitted in accordance with §761.61(a)(3) of this part, may require cleanup of the site, or portions of it, to more stringent cleanup levels than are otherwise required in this section, based on the proximity to areas such as residential dwellings, hospitals, schools, nursing homes, playgrounds, parks, day care centers, endangered species habitats, estuaries, wetlands, national parks, national wildlife refuges, commercial fisheries, and sport fisheries.

[ ] (5) *Site cleanup.* In addition to the options set out in this paragraph, PCB disposal technologies approved under §§761.60 and 761.70 are acceptable for on-site self-

implementing PCB remediation waste disposal within the confines of the operating conditions of the respective approvals.

- [ ] (i) *Bulk PCB remediation waste.* Any person cleaning up bulk PCB remediation waste shall do so to the levels in paragraph (a)(4)(i) of this section.
- [ ] (A) Any person cleaning up bulk PCB remediation waste on-site using a soil washing process may do so without EPA approval, subject to all of the following:
- (1) A non-chlorinated solvent is used.
  - (2) The process occurs at ambient temperature.
  - (3) The process is not exothermic.
  - (4) The process uses no external heat.
  - (5) The process has secondary containment to prevent any solvent from being released to the underlying or surrounding soils or surface waters.
  - (6) Solvent disposal, recovery, and/or reuse is in accordance with relevant provisions of approvals issued according to paragraphs (b)(1) or (c) of this section or applicable paragraphs of §761.79.
- [ ] (B) Bulk PCB remediation waste may be sent off-site for decontamination or disposal in accordance with this paragraph, provided the waste is either dewatered on-site or transported off-site in containers meeting the requirements of the DOT Hazardous Materials Regulations (HMR) at 49 CFR parts 171 through 180.
- [X] (1) Removed water shall be disposed of according to paragraph (b)(1) of this section.
- In the event liquids are encountered which require disposal (dewatering of groundwater from the excavation or liquids from the remediation waste), they must be sampled in accordance with §761.269 prior to disposal.*
- [ ] (2) Any person disposing off-site of dewatered bulk PCB remediation waste shall do so as follows:
- (i) Unless sampled and analyzed for disposal according to the procedures set out in §§761.283, 761.286, and 761.292, the bulk PCB remediation waste shall be assumed to contain  $\geq 50$  ppm PCBs.
  - (ii) Bulk PCB remediation wastes with a PCB concentration of  $< 50$  ppm shall be disposed of in accordance with paragraph (a)(5)(v)(A) of this section.
  - (iii) Bulk PCB remediation wastes with a PCB concentration  $\geq 50$  ppm shall be disposed of in a hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA, or a PCB disposal facility approved under this part.
  - (iv) The generator must provide written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction EPA Method 3500B/3540C or Method 3500B/3550B followed by chemical analysis using EPA Method 8082 in SW-846 or methods validated under

subpart Q of this part) at least 15 days before the first shipment of bulk PCB remediation waste from each cleanup site by the generator, to each off-site facility where the waste is destined for an area not subject to a TSCA PCB Disposal Approval.

- [ ] (3) Any person may decontaminate bulk PCB remediation waste in accordance with §761.79 and return the waste to the cleanup site for disposal as long as the cleanup standards of paragraph (a)(4) of this section are met.
- [ ] (ii) Non-porous surfaces. PCB remediation waste non-porous surfaces shall be cleaned on-site or off-site for disposal on-site, disposal off-site, or use, as follows:
  - [ ] (A) For on-site disposal, non-porous surfaces shall be cleaned on-site or off-site to the levels in paragraph (a)(4)(ii) of this section using:
    - (1) Procedures approved under §761.79.
    - (2) Technologies approved under §761.60(e).
    - (3) Procedures or technologies approved under paragraph (c) of this section.
  - [ ] (B) For off-site disposal, non-porous surfaces:
    - (1) Having surface concentrations  $<100 \mu\text{g}/100 \text{ cm}^2$  shall be disposed of in accordance with paragraph (a)(5)(i)(B)( 2 )( ii ) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(i).
    - (2) Having surface concentrations  $\geq 100 \mu\text{g}/100 \text{ cm}^2$  shall be disposed of in accordance with paragraph (a)(5)(i)(B)( 2 )( iii ) of this section. Metal surfaces may be thermally decontaminated in accordance with §761.79(c)(6)(ii).
  - [ ] (C) For use, non-porous surfaces shall be decontaminated on-site or off-site to the standards specified in §761.79(b)(3) or in accordance with §761.79(c).
- [ ] (iii) *Porous surfaces*. Porous surfaces shall be disposed on-site or off-site as bulk PCB remediation waste according to paragraph (a)(5)(i) of this section or decontaminated for use according to §761.79(b)(4), as applicable.
- [ ] (iv) *Liquids*. Any person disposing of liquid PCB remediation waste shall either:
  - (A) Decontaminate the waste to the levels specified in §761.79(b)(1) or (b)(2).
  - (B) Dispose of the waste in accordance with paragraph (b) of this section or an approval issued under paragraph (c) of this section.
- [ ] (v) *Cleanup wastes*. Any person generating the following wastes during and from the cleanup of PCB remediation waste shall dispose of or reuse them using one of the following methods:
  - [ X ] (A) Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from cleanup activities shall be either decontaminated

in accordance with §761.79(b) or (c), or disposed of in one of the following facilities, without regard to the requirements of subparts J and K of this part:

- ( 1 ) A facility permitted, licensed, or registered by a State to manage municipal solid waste subject to part 258 of this chapter.
- ( 2 ) A facility permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste subject to §§257.5 through 257.30 of this chapter, as applicable.
- ( 3 ) A hazardous waste landfill permitted by EPA under section 3004 of RCRA, or by a State authorized under section 3006 of RCRA.
- ( 4 ) A PCB disposal facility approved under this part.

***Disposal of personal protective equipment waste was not discussed in the work plan, but should be handled in accordance with the above mentioned regulations.***

- [ ] (B) Cleaning solvents, abrasives, and equipment may be reused after decontamination in accordance with §761.79.

[ ] (6) **Cleanup verification** —

- [X] (i) **Sampling and analysis.** Any person collecting and analyzing samples to verify the cleanup and on-site disposal of bulk PCB remediation wastes and porous surfaces must do so in accordance with subpart O of this part. Any person collecting and analyzing samples from non-porous surfaces must do so in accordance with subpart P of this part. Any person collecting and analyzing samples from liquids must do so in accordance with §761.269. Any person conducting interim sampling during PCB remediation waste cleanup to determine when to sample to verify that cleanup is complete, may use PCB field screening tests.

***A total of 15 cleanup verification samples have been proposed (three from each excavation wall/base); since verification sampling must meet the requirements of §761 Subpart O, additional samples must be collected. Samples may be composited in accordance with the procedures outlined in §761 Subpart O to reduce analytical costs.***

- [ ] (ii) **Verification.**
  - (A) Where sample analysis results in a measurement of PCBs less than or equal to the levels specified in paragraph (a)(4) of this section, self-implementing cleanup is complete.
  - (B) Where sample analysis results in a measurement of PCBs greater than the levels specified in paragraph (a)(4) of this section, self-implementing cleanup of the sampled PCB remediation waste is not complete. The owner or operator of the site must either dispose of the sampled PCB remediation waste, or re-clean the waste represented by the sample and reinitiate sampling and analysis in accordance with paragraph (a)(6)(i) of this section.

- [X] (7) **Cap requirements.** A cap means, when referring to on-site cleanup and disposal of PCB remediation waste, a uniform placement of concrete, asphalt, or similar material of minimum thickness spread over the area where remediation waste was removed or left in place in order to prevent or minimize human exposure, infiltration of water, and erosion. Any person designing and constructing a cap must do so in accordance with §264.310(a) of this chapter, and ensure that it complies with the permeability, sieve, liquid limit, and plasticity index parameters in §761.75(b)(1)(ii) through (b)(1)(v). A cap of compacted soil shall have a minimum thickness of 25 cm (10 inches). A concrete or asphalt cap shall have a minimum thickness of 15 cm (6 inches). A cap must be of sufficient strength to maintain its effectiveness and integrity during the use of the cap surface which is exposed to the environment. A cap shall not be contaminated at a level  $\geq 1$  ppm PCB per Aroclor<sup>TM</sup>(or equivalent) or per congener. Repairs shall begin within 72 hours of discovery for any breaches which would impair the integrity of the cap.

*Depending on the final verification results, should a cap be used as a means of demonstrating compliance with the cleanup objectives, documentation should be provided to demonstrate that the final cap meets all of the prescribed requirements, including thickness and physical parameters.*

- [X] (8) **Deed restrictions for caps, fences and low occupancy areas.** When a cleanup activity conducted under this section includes the use of a fence or a cap, the owner of the site must maintain the fence or cap, in perpetuity. In addition, whenever a cap, or the procedures and requirements for a low occupancy area, is used, the owner of the site must meet the following conditions:

*Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.*

- [ ] (i) Within 60 days of completion of a cleanup activity under this section, the owner of the property shall:

- [X] (A) Record, in accordance with State law, a notation on the deed to the property, or on some other instrument which is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property:
- (1) That the land has been used for PCB remediation waste disposal and is restricted to use as a low occupancy area as defined in §761.3.
  - (2) Of the existence of the fence or cap and the requirement to maintain the fence or cap.
  - (3) The applicable cleanup levels left at the site, inside the fence, and/or under the cap.

***Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.***

- [X] (B) Submit a certification, signed by the owner, that he/she has recorded the notation specified in paragraph (a)(8)(i)(A) of this section to the EPA Regional Administrator.

***Depending upon the final verification results and future site use, the use of a fence, cap, or low occupancy restriction as a means of obtaining closure for PCB impacts must be recorded as a deed restriction against the property with the St. Clair County Recorder of Deeds. A signed/certified copy of the deed restriction must be returned to the Regional Administrator within 60 days, along with a signed statement from the owner indicating that the deed restriction has been recorded.***

- [ ] (ii) The owner of a site being cleaned up under this section may remove a fence or cap after conducting additional cleanup activities and achieving cleanup levels, specified in paragraph (a)(4) of this section, which do not require a cap or fence. The owner may remove the notice on the deed no earlier than 30 days after achieving the cleanup levels specified in this section which do not require a fence or cap.

- [ ] (9) **Recordkeeping.** For paragraphs (a)(3), (a)(4), and (a)(5) of this section, recordkeeping is required in accordance with §761.125(c)(5).



September 12, 2011

Mr. Peter Ramanauskas  
U.S. Environmental Protection Agency  
Corrective Action Section 1  
77 West Jackson Street  
Chicago, Illinois 60604

**RE: Transmittal of Self-Implementation Cleanup and Disposal Plan for the Former ACF Facility, East St. Louis, Illinois**

Dear Mr. Ramanauskas:

AMEC is submitting this Self-Implementation Cleanup and Disposal Plan for the tasks related to the remediation of PCBs for the subject site. The former ACF site is entered into the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) as state identification number **ILD006273809**. IEPA has indicated that the USEPA will require review and approval of the approach for polychlorinated biphenyl (PCB) remediation.

**Site Location**

The site was utilized for cleaning, repairing, blasting and painting tank and covered hopper cars on the property located at 100 Trendley Avenue, East St. Louis, Illinois. The 19.9-acre site is located near the Mississippi River front of the City of East St. Louis, Illinois in St. Clair County (Figure 1). The property is within Cahokia, Illinois 7½-minute quadrangle. The site lies within a commercial and industrial area of East Saint Louis, Illinois. The Site latitude and longitude is 38.622738 and -90.171833.

The property is located adjacent to and south of the Malcolm Martin Fountain, now part of the Metro East Park and Recreation District (MEPRD) of St. Clair County, on the Mississippi River front along Trendley Avenue.

The Site is surrounded by rail lines on to the east, west and south. The lines are owned and used by either the Terminal Railroad Association or by Illinois Central Railroad.

There are no structures on the property. Residual areas of concrete floor and foundations that were part of former buildings remain. The property is relatively flat and is in the former floodplain of the America Bottoms physiographic area that is now protected by a 500-year flood levee.

### **Site History**

Operations at the Site ceased in 1980 for rail car work and the Site has been vacant property since that date with the exception of remedial activities. Soil remedial activities have been extensive and were conducted in 1982 and 1991. The 1982 tasks were not well documented. The 1991 remedial actions are presented in the PSC report, *Site Closure Report for the Decommissioned ACF Facility in East St. Louis, Illinois*, dated November 1994 and previously submitted to IEPA.

As part of the 2010 investigation activities, 52 test pits were excavated using a backhoe, and 35 probeholes were advanced using a GeoProbe™ system and a MacroCore™ sampler. One monitoring well and eight piezometers were installed. Soil and groundwater samples were retained and analyzed for the constituents required in IAC Section 740 as part of a comprehensive site investigation. Groundwater monitoring was performed in May 2010. The complete results were presented to the IEPA in the *Comprehensive Site Investigation Report* dated January 6, 2010, prepared by PSC for ACF.

The subsurface lithology consists of fill material overlying alluvial materials deposited on the floodplain of the Mississippi River. The alluvial materials consist of silt, sand, and gravel for the upper 60 to 75 feet then "Valley Train" (coarse sand and gravel) sediments to approximately 100 to 120 feet below ground surface (bgs). Below 100 to 120 feet, the bedrock most likely consists of massive limestone or dolomite of Mississippian age. A shallow groundwater-bearing zone appears to be the silty-sand unit that underlies the fill. Groundwater appears to be under an unconfined condition within the silty-sand unit. Based upon the guidelines in IAC Section 620, groundwater is categorized as Class I Groundwater.

### **Nature of the Contaminants**

In 2010, as part of a site investigation for a pending property transfer, the ACF Site was investigated for a wide range of chemicals suspected of being site-related chemicals of concern including: semi-volatile organic compounds (SVOCs), IEPA inorganics list (including Resource Conservation and Recovery Act [RCRA] metals), VOCs, total petroleum hydrocarbons (TPH), and PCBs. Figure 2 illustrates the 2010 Phase 2 sampling locations. One hundred twenty-five (125) samples were tested for PCBs (EPA Method 8082 for seven Aroclors) (Figures 2, 3 and 4). In 2010, PCBs were only detected above 25 milligrams per kilogram (mg/kg) at one location, 5D/SW (Figure 5).

Additional site investigations were performed in 2011 to define the impacted area with PCBs above 50 mg/kg. An additional 13 samples were collected at five locations. Only two sample results were over 50 mg/kg, and these samples are surrounded with concentrations less than 1 mg/kg in all but one direction as noted on the Figures 6 and 7.

### **Sampling Procedures and Sample Results – 2011 Sampling**

For initial shallow soil sampling, test pits were excavated to a depth of 10 feet bgs. The soil was screened in the field for visible impact and odors with a photoionization detector (PID). Subsurface lithology and soil conditions were noted for the recovered sample. Field observations and PID readings were recorded on field forms. Test pit samples were collected based on field observations resulting in samples typically from 2 and 7 feet bgs.

To efficiently obtain deeper samples, access locations, and minimize the generation of soil cuttings, most locations were sampled with a GeoProbe system. A 5-foot long, 1½-inch diameter MacroCore™ sampler was advanced using direct-push methods. All samples were recovered in disposable acetate liners. The MacroCore™ sampler was advanced to a sample depth corresponding to a desired sample depth or until refusal occurred. Sampling was performed to approximately 11 feet in the hot spot area of the site.

### **Extent of PCB Impact**

The extent of PCB impact has been defined vertically and horizontally as shown on Figures 6 and 7 and listed on Table 1. The area of PCB impact over 50 mg/kg is limited to a small southeast portion of the site and has the dimensions of approximately 23 by 15 feet. The dimensions assume excavation to the point where the sample results was less than 1 mg/kg. The sampling locations were approximately 7.5 feet apart. Vertical definition of PCB extent was performed by sampling at depths of 2, 7, 9 and 11 feet as shown on the cross-section. The deepest location of PCB impact over 50 mg/kg was detected at 7 feet. Analytical data sheets are provided in Appendix A.

### **PCB Remediation Plan**

The remediation goal for this portion of the site is 50 mg/kg. Previous investigations of the PCB hot spot area, defined as soil over 50 mg/kg, are complete. The estimated amount of PCB impacted soil is 210 tons. AMEC will provide soil removal, backfill, and offsite disposal to Heritage's Subtitle C Landfill in Roachdale, Indiana (EPA ID No. IND 980 503 890).

Confirmation sampling is proposed after excavation. AMEC will use 24-hour turnaround lab testing for confirmation samples. If impact above 50 ppm is detected, the excavation will be continued. In the unlikely event that the excavation grows an additional 25 percent of the original estimated volume, USEPA will be contacted to evaluate if other closure options are possible, such as statistical data evaluation.

Confirmation sampling is proposed by the collection of discrete soil samples for PCB testing. Using the investigation data, the anticipated excavation will be approximately 23 feet by 15 feet with a depth of up to 11 feet. AMEC proposes three discrete soil samples from each side wall and three from the bottom of the excavation for a total of 15 soil samples. The samples will be tested with 24-hour turnaround (EPA Method 8082) to

evaluate if more soil removal is required. Figure 8 provides a sample plan schematic of the anticipated excavation.

Backfill, using clean soil from an offsite documented source, will provide over 3 feet of clean soil over this remediation area. Other areas of the site where PCBs exceed the IEPA remediation goal of 1 mg/kg will be capped during future site activities.

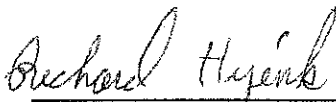
The site is considered low-occupancy since it is a vacant piece of land. Potential future use is a parking lot and as IDOT highway extension for access to Illinois Route 3.

**Certification**

Since the site is not active and no office or staff is present at that location, all site investigation and remediation documentation will be available for USEPA inspection at the ACF corporate office location:

ACF Industries, LLC  
101 Clark Street  
St. Charles, MO. 63301-2075  
Attention: Rich Hyink, Director of Safety & Environment  
Mobile: 636-233-2707  
Office: 636-949-2399 ext 1003  
Email: [rhyink@acfindustries.com](mailto:rhyink@acfindustries.com)

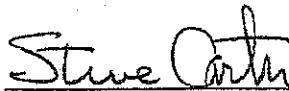
Certification of this remediation plan is provided below by the client and the firm directing the remediation.



Rich Hyink  
ACF Industries LLC

9-12-11

Date



Steve Carter  
AMEC E & I, Inc.

12 September 2011

Date

**Notifications**

Additional agencies including IEPA, St. Clair County, and the City of East St. Louis will be notified prior to PCB remediation activities

**Schedule**

AMEC requests EPA review within 30 days so remediation can be completed this fall. AMEC anticipates that the remediation and backfilling tasks can be completed in three consecutive field days.

Mr. Peter Ramanauskas  
September 12, 2011  
Page 5

**Closing**

AMEC appreciates your review of this Self-Implementation Cleanup and Disposal Plan. Should you have any questions regarding this proposal, please contact Dale Markley at 314-971-6555.

Sincerely,

**AMEC Environment & Infrastructure, Inc.**



Dale E. Markley  
Senior Principal Scientist



Stephen R. Carter  
Chief Scientist, Vice President

pc: Jean Greensley, USEPA  
Rich Hyink, ACF Director of Safety & Environment  
Todd Gross, IEPA

**Attachments:**

- Figure 1 Site Location Figure (USGS topographic map)
- Figure 2 2010 Phase 2 Soil Sampling Locations
- Figure 3 PCB's Concentration in Soil – Depth Interval 0 to 3 feet
- Figure 4 PCB's Concentration in Soil – Depth Interval 3 to 10 feet
- Figure 5 Focus Area Soil Sample Results – PCB Concentration Map –Sample 5D/SW
- Figure 6 2011 Additional PCB Sampling Location and Proposed Remediation Area  
– Plan View
- Figure 7 2011 Additional PCB Sampling Location and Proposed Remediation Area  
- Cross Section
- Figure 8 Schematic A-A' of Sampling Plan for Excavation

Table 1 Summary of PCB Results

Appendix A Laboratory Data Sheets (on CD)



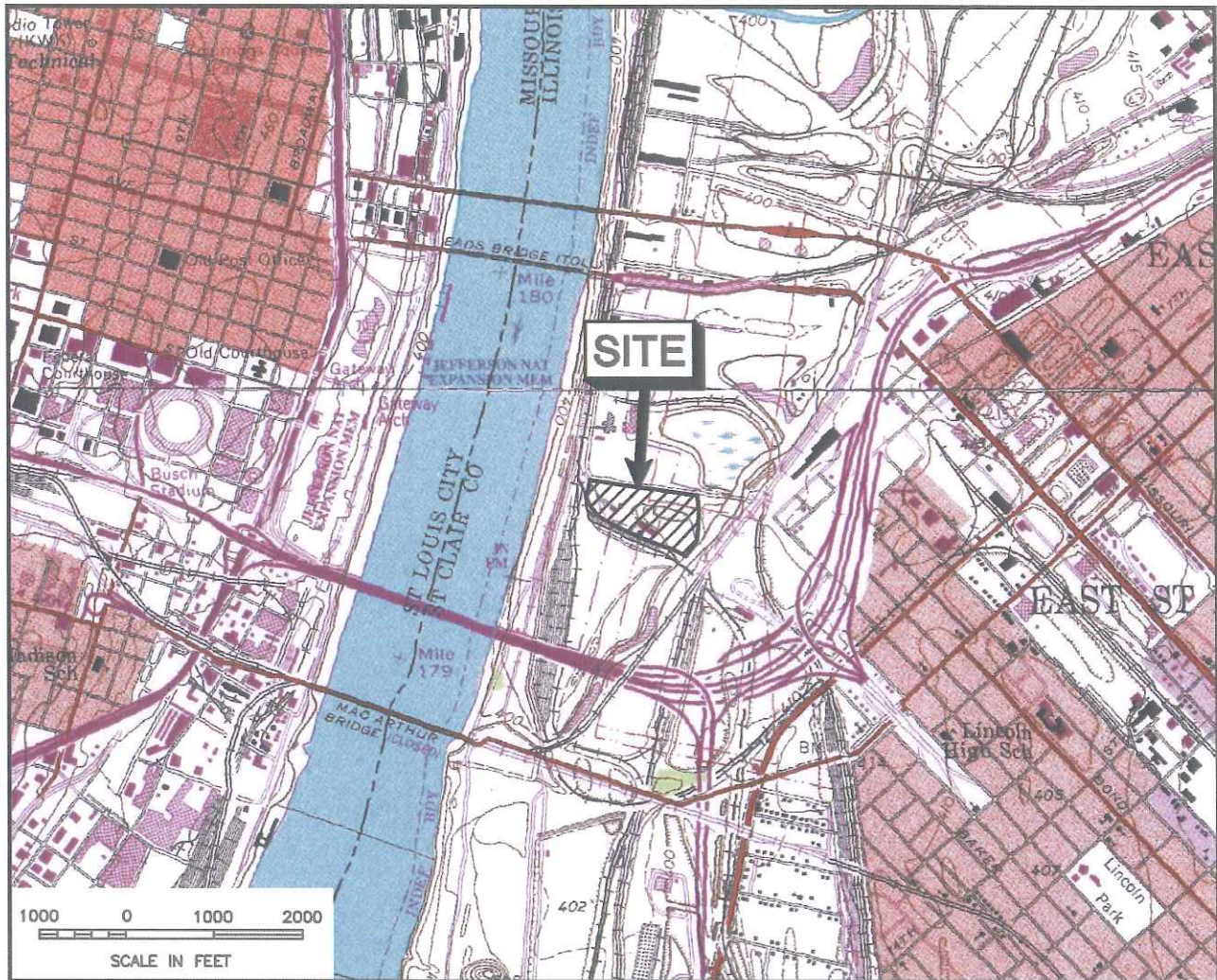
ILLINOIS



ST. CLAIR COUNTY



AREA IN DETAIL



Modified from U.S. Geological Survey, Cahokia & Granite City, Illinois quadrangle, Photorevised 1993.

SCALE IS VARIABLE



TITLE:  
SITE LOCATION MAP

DWN: TMM  
CHKD:  
DATE: 12/6/10

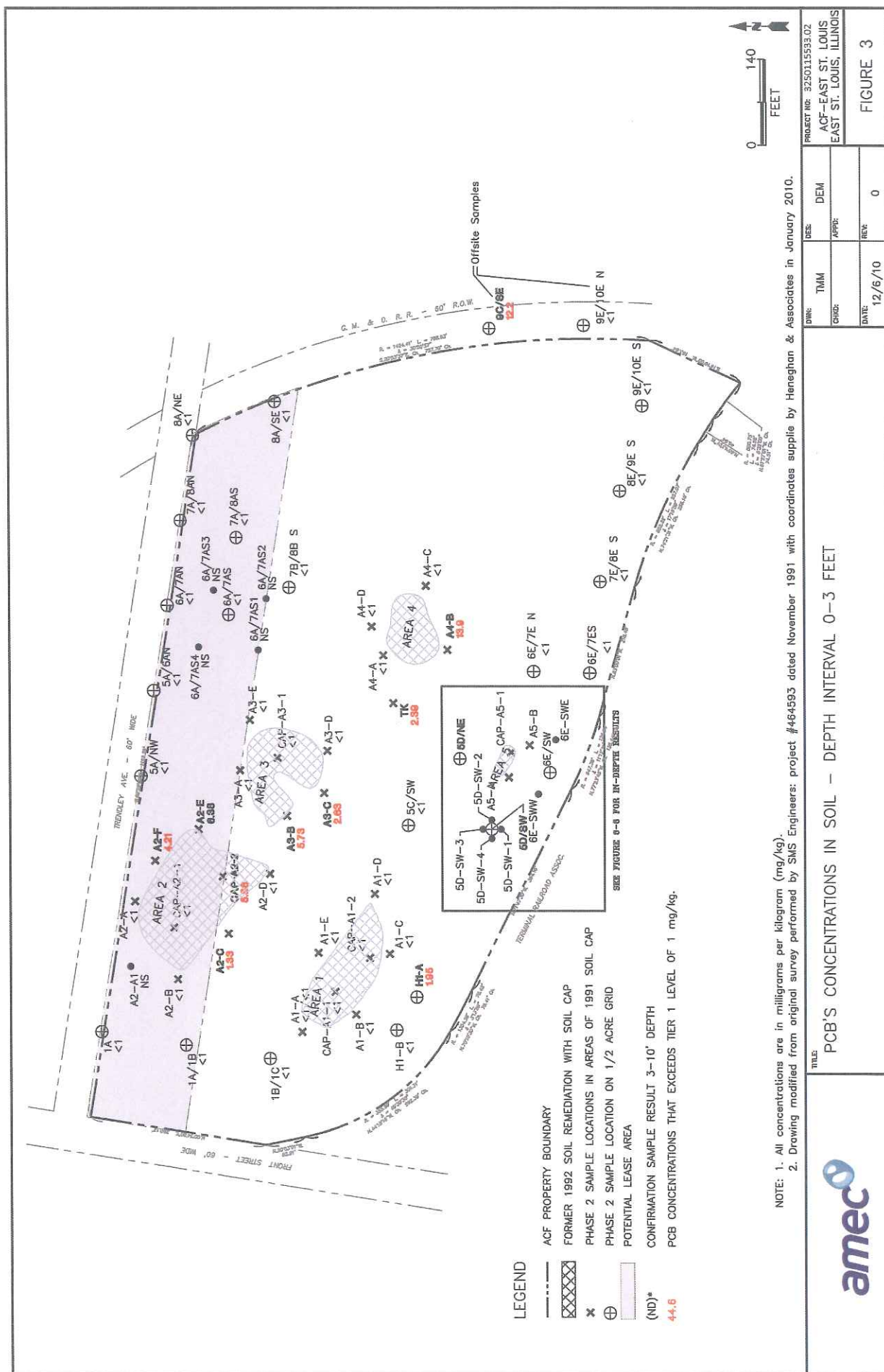
DES: DEM  
APPD:  
REV: 0

PROJECT NO.: 3250115533.02  
ACF-EAST ST. LOUIS  
EAST ST. LOUIS, ILLINOIS

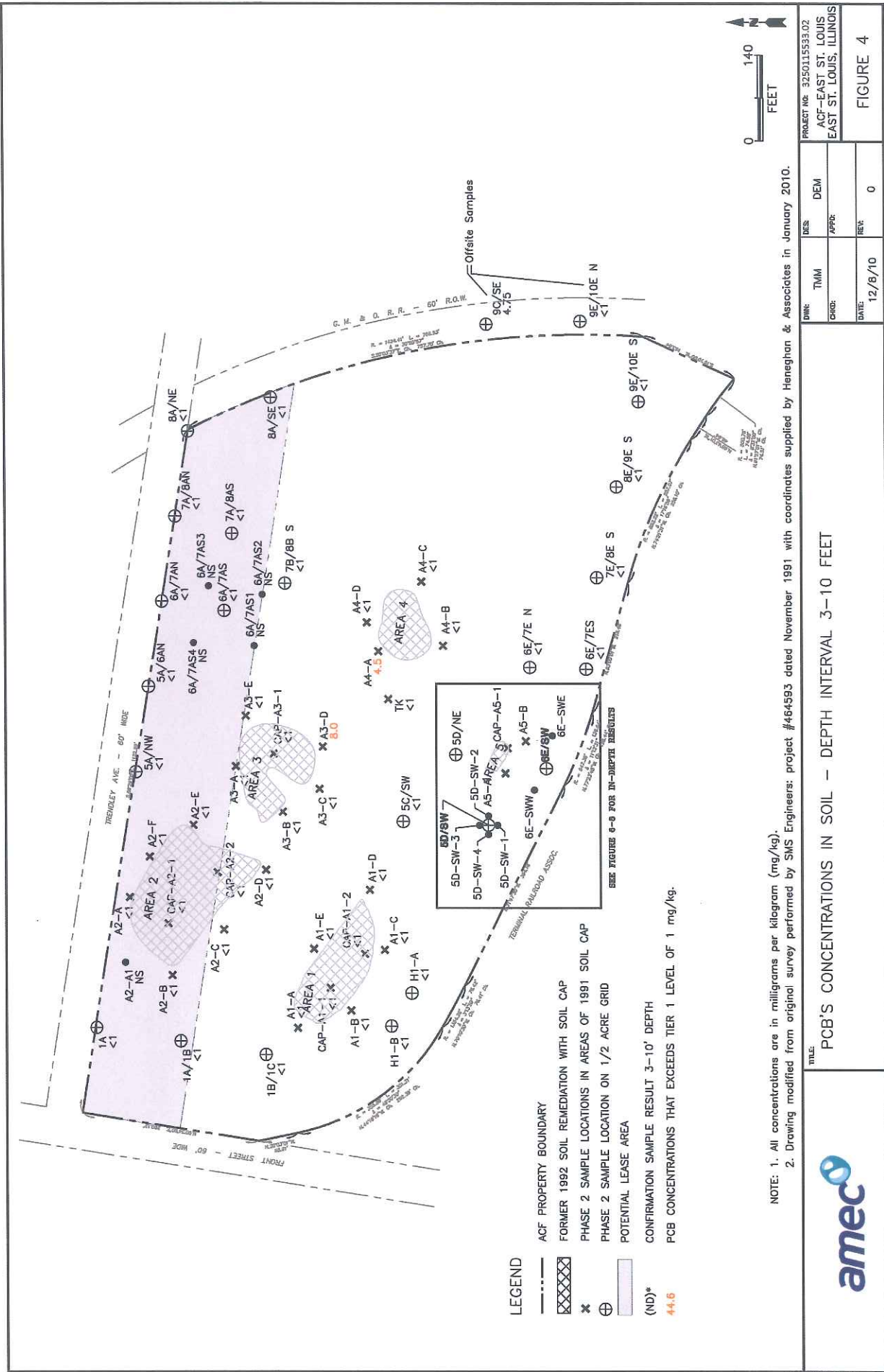
FIGURE 1



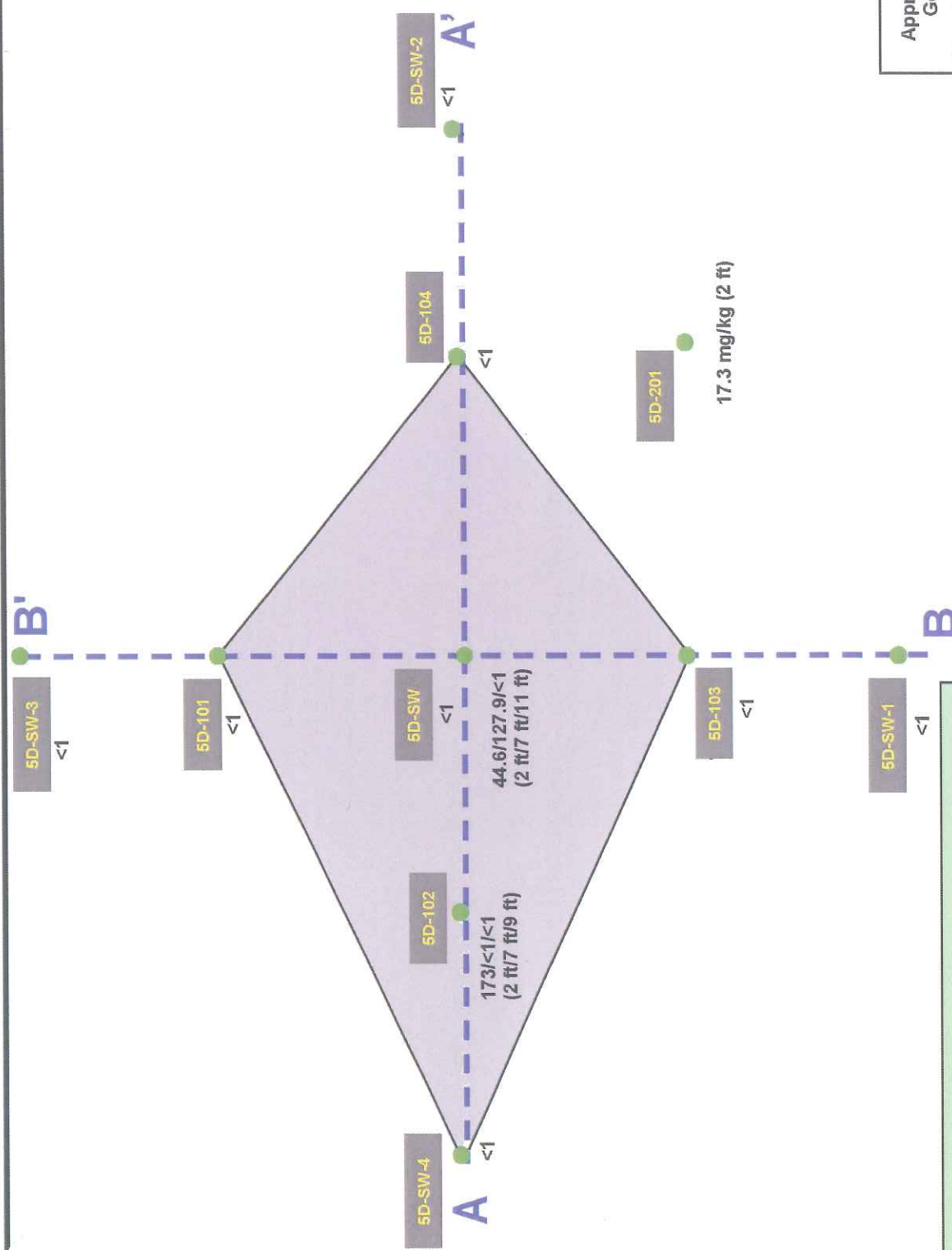






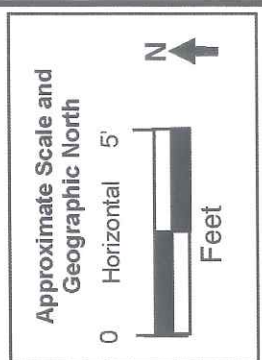




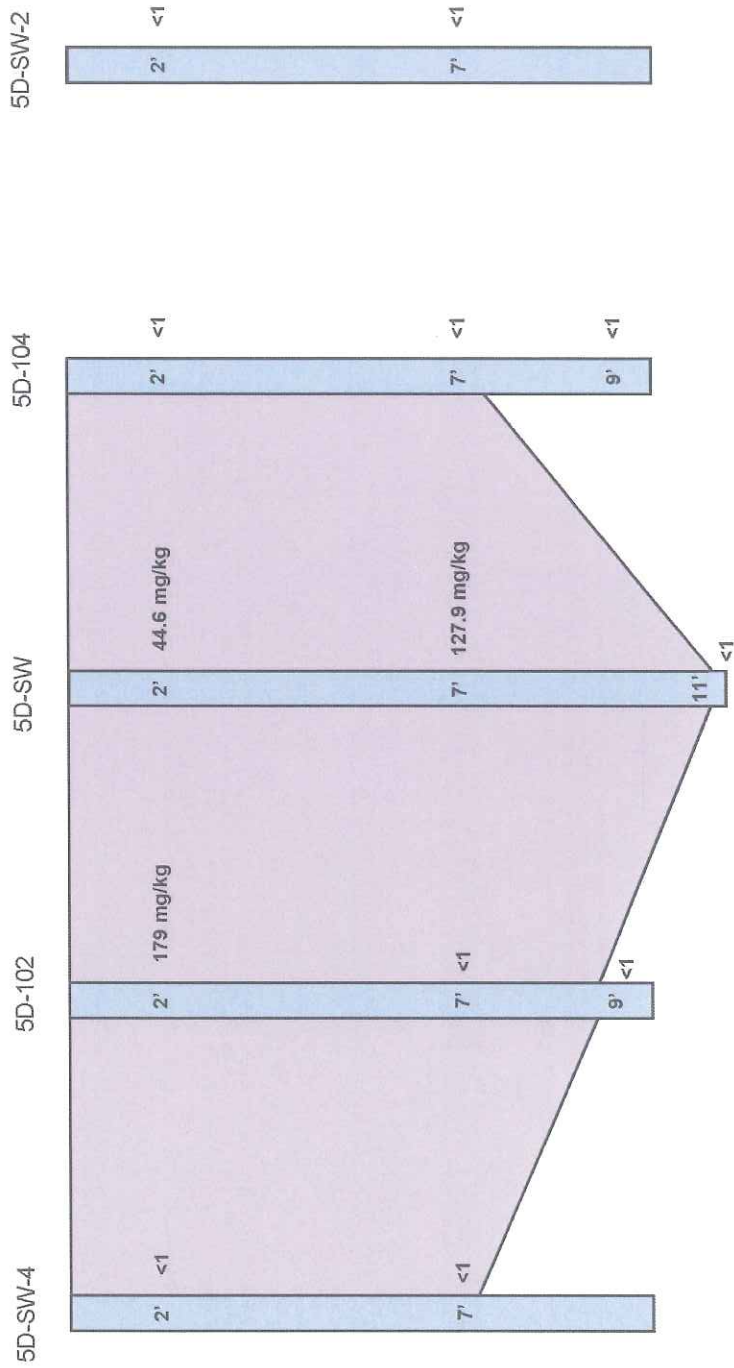


● Soil Boring  
 Area of Excavation  
 A - - - A' Cross-Section Profile Line'

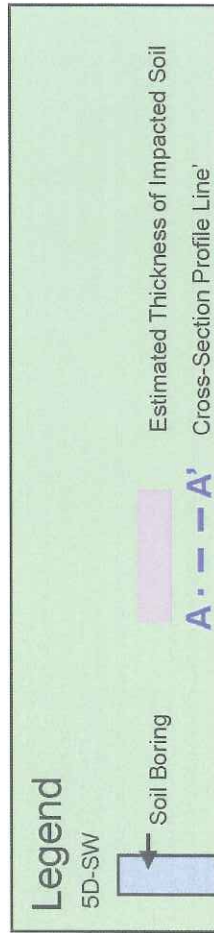
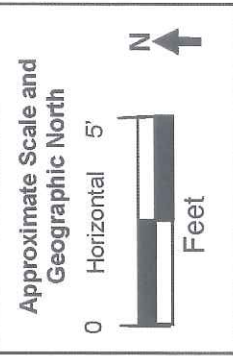
Note: Results >50 mg/kg are shown.



	2011 Additional PCB Sampling Location and Proposed Remediation Area - Plan View				ACF East St. Louis, IL	
					DWN: JLG	DEM
					Project Number: 624-0908-0025	
					DATE: 8/10/2011	REV: 0
FIGURE 6						



**Cross Section – PCB Area  
ACF East St. Louis**



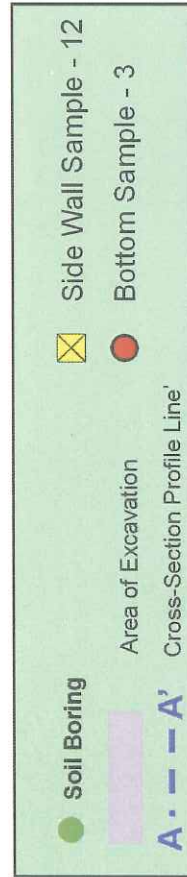
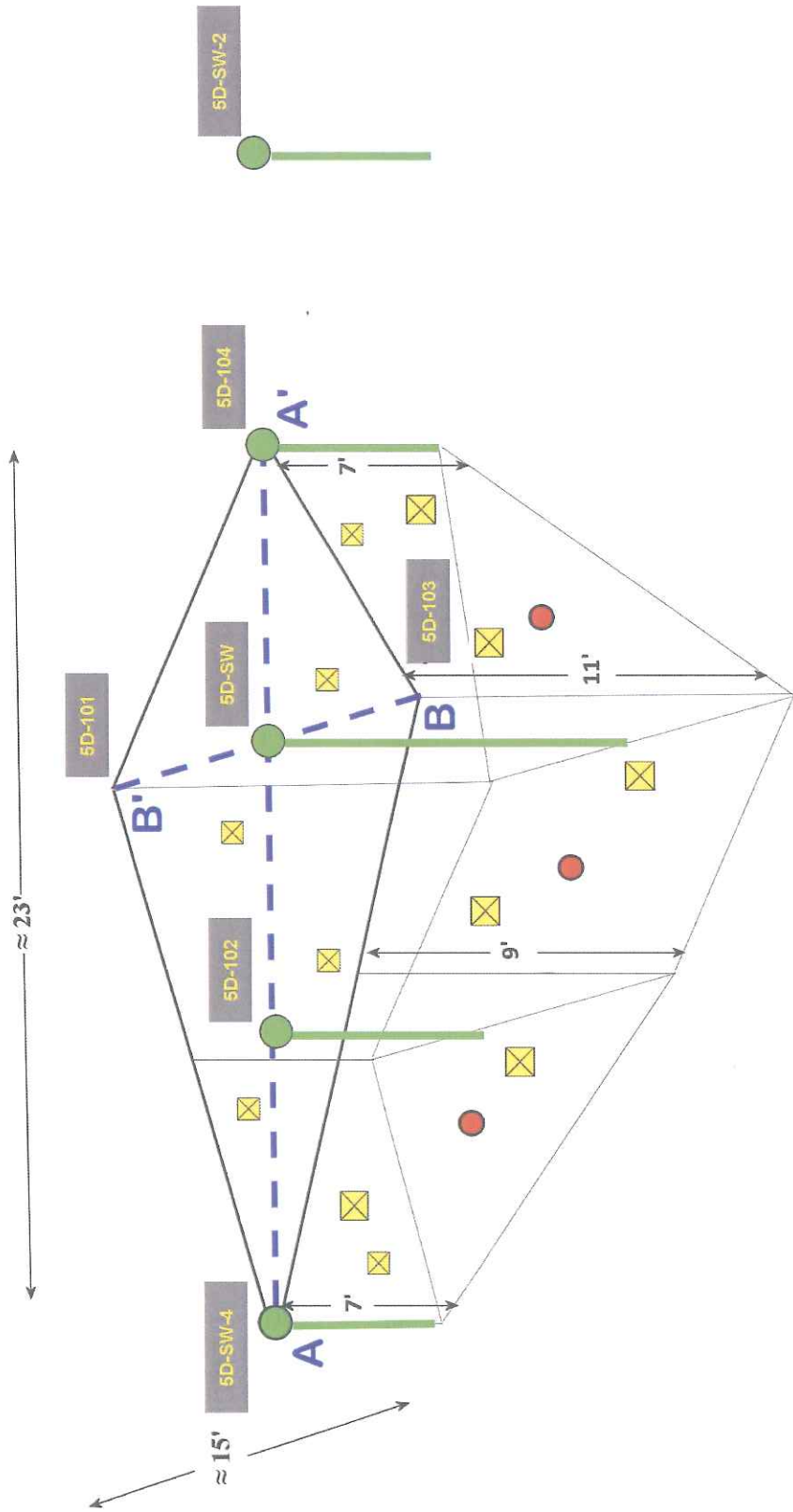
**2011 Additional PCB Sampling Location and  
Proposed Remediation Area - Cross Section**

ACF  
East St. Louis, IL

DWN:	JLG	PGRM:	DEM
DATE:	8/10/2011	Project Number:	624-0908-0025
		REV:	0

**FIGURE 7**





**Schematic A-A' and B-B'  
of Sampling Plan for Excavation**

DWN: JLG	PERM: DEM	ACF East St. Louis, IL
DATE: 8/10/2011	Project Number: 824-008-0025	
	REV: 0	

**Table 1**  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2011

Sample Identification	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
5D-101 2 ft	05/27/2011	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0	µg/Kg-dry < 45.0
5D-101 7 ft	05/27/2011	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9
5D-101 9 ft	05/27/2011	< 46.1	< 46.1	< 46.1	< 46.1	< 46.1	< 46.1	< 46.1	< 46.1
5D-104 2 ft	05/27/2011	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5
5D-104 7 ft	05/27/2011	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4
5D-104 9 ft	05/27/2011	< 42.9	< 42.9	< 42.9	< 42.9	< 42.9	< 42.9	< 42.9	< 42.9
5D-102 2 ft	05/27/2011	< 46.50	< 46.50	< 46.50	< 46.50	< 46.50	< 46.50	179000	179000
5D-102 7 ft	05/27/2011	< 49.4	< 49.4	< 49.4	< 49.4	< 49.4	< 49.4	< 49.4	< 49.4
5D-102 9 ft	05/27/2011	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4	< 46.4
5D-103 2 ft	05/27/2011	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3
5D-103 7 ft	05/27/2011	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0
5D-103 9 ft	05/27/2011	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1
5D-201 2 ft	06/13/2011	280	< 419	< 419	< 419	< 419	< 419	1450	1730
<i>Remediation Objectives:</i>									
Polychlorinated biphenyls	PCBs	---	---	---	---	---	---	---	1000
Remediation objective 1	---	---	---	---	---	---	---	---	1000
Exceeds Tier 1 Remediation Objective	---	---	---	---	---	---	---	---	1000

1. All concentrations are in µg/Kg-dry.

2. Remediation objectives from IAC Section 742.

3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

sample collected from PCB hot spot area near 5D-SW

Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Sample Depth	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
1A1B-2 ft	04/23/2010	2	< 45.7	< 45.7	< 45.7	< 45.7	< 45.7	< 45.7	29	29
1A1B-7 ft	04/23/2010	7	< 52.1	< 52.1	< 52.1	< 52.1	< 52.1	< 52.1	44	44
1A-2 ft	04/23/2010	2	< 47.8	< 47.8	< 47.8	< 47.8	< 47.8	< 47.8	< 47.8	< 47.8
1A-7 ft	04/23/2010	7	< 43.1	< 43.1	< 43.1	< 43.1	< 43.1	< 43.1	< 43.1	< 43.1
5A-NW-2 ft	04/23/2010	2	< 45.8	< 45.8	< 45.8	< 45.8	< 45.8	< 45.8	367	367
5A-NW-7 ft	04/23/2010	7	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6
6A7A-N-2 ft	04/23/2010	2	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1	163	163
6A7A-N-7 ft	04/23/2010	7	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3
5A6A-N-2 ft	04/23/2010	2	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3
5A6A-N-7 ft	04/23/2010	7	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1	< 44.1
6A7A-S-2 ft	04/23/2010	2	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3
6A7A-S-7 ft	04/23/2010	7	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6
7A8A-N-2 ft	04/23/2010	2	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	32	32
7A8A-N-7 ft	04/23/2010	7	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6
7A8A-S-2 ft	04/23/2010	2	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5
7A8A-S-7 ft	04/23/2010	7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7
8A-NE-2 ft	04/23/2010	2	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4
8A-NE-7 ft	04/23/2010	7	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	64.8	64.8
<b>Remediation Objectives ug/kg:</b>										
Soil Ingestion (residential)			---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)			---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)			---	---	---	---	---	---	---	1000
Soil Inhalation (residential)			---	---	---	---	---	---	---	---
Soil Inhalation (commercial)			---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)			---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion			---	---	---	---	---	---	---	---

**PCBs Polychlorinated biphenyls.**

--- Remediation objective for this exposure pathway has not been established by the IEPA.

- Notes:**
1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
  2. Remediation objectives from IAC Section 742.
  3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW



Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
5D-SW1-2 ft	05/19/2010	< 64.8	< 64.8	< 64.8	< 64.8	< 64.8	< 64.8	< 64.8	< 64.8
5D-SW1-7 ft	05/19/2010	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3	< 47.3
5D-SW2-2 ft	05/19/2010	< 68.5	< 68.5	< 68.5	< 68.5	< 68.5	< 68.5	< 68.5	< 68.5
5D-SW2-7 ft	05/19/2010	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6	< 43.6
5D-SW3-2 ft	05/19/2010	< 71.2	< 71.2	< 71.2	< 71.2	< 71.2	< 71.2	264	264
5D-SW3-7 ft	05/19/2010	< 42.6	< 42.6	< 42.6	< 42.6	< 42.6	< 42.6	< 42.6	< 42.6
5D-SW4-2 ft	05/19/2010	< 71.4	< 71.4	< 71.4	< 71.4	< 71.4	< 71.4	< 71.4	< 71.4
5D-SW4-7 ft	05/19/2010	< 43.3	< 43.3	< 43.3	< 43.3	< 43.3	< 43.3	< 43.3	< 43.3
6E-SWW-2 ft	05/19/2010	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4
6E-SWW-7 ft	05/19/2010	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0
6E-SWE-2 ft	05/19/2010	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2	1130	1130
6E-SWE-7 ft	05/19/2010	< 69.6	< 69.6	< 69.6	< 69.6	< 69.6	< 69.6	1910	1910
H1-A1-2 ft	05/19/2010	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5
H1-A1-7 ft	05/19/2010	< 44.5	< 44.5	< 44.5	< 44.5	< 44.5	< 44.5	< 44.5	< 44.5
H1-A2-2 ft	05/19/2010	< 72.1	< 72.1	< 72.1	< 72.1	< 72.1	< 72.1	71	71
H1-A2-7 ft	05/19/2010	< 51.5	< 51.5	< 51.5	< 51.5	< 51.5	< 51.5	< 51.5	< 51.5
H1-A3-2 ft	05/19/2010	< 70.6	< 70.6	< 70.6	< 70.6	< 70.6	< 70.6	< 70.6	< 70.6
H1-A3-7 ft	05/19/2010	< 45.4	< 45.4	< 45.4	< 45.4	< 45.4	< 45.4	< 45.4	< 45.4
<b>Remediation Objectives ug/kg:</b>									
Soil Ingestion (residential)		---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)		---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)		---	---	---	---	---	---	---	1000
Soil Inhalation (residential)		---	---	---	---	---	---	---	---
Soil Inhalation (commercial)		---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)		---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion		---	---	---	---	---	---	---	---

**PCBs** Polychlorinated biphenyls.

Remediation objective for this exposure pathway has not been established by the IEPA.

**Notes:**

1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
2. Remediation objectives from IAC Section 742.
3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW

**Table 1**  
**Soil Sample Analytical Results - Polychlorinated Biphenyls**  
**Former ACF Facility East St. Louis, Illinois**  
**2010**

Sample Location	Sample Date	Sample Depth	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
A1-D 2ft	04/01/2010	2	< 60.7	< 60.7	< 60.7	< 60.7	< 60.7	< 60.7	77.2	77.2
A1-D 7ft	04/01/2010	7	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3	< 42.3
A1-E 2ft	04/01/2010	2	< 47.9	< 47.9	< 47.9	< 47.9	< 47.9	< 47.9	25	25
A1-E 7ft	04/01/2010	7	< 45.9	< 45.9	< 45.9	< 45.9	< 45.9	< 45.9	< 45.9	< 45.9
A2-A 2ft	04/01/2010	2	< 50.5	< 50.5	< 50.5	< 50.5	< 50.5	< 50.5	131	131
A2-A 6ft	04/01/2010	6	< 69.2	< 69.2	< 69.2	< 69.2	< 69.2	< 69.2	< 69.2	< 69.2
A2-B 2ft	04/01/2010	2	< 49.7	< 49.7	< 49.7	< 49.7	< 49.7	< 49.7	< 49.7	< 49.7
A2-B 7ft	04/01/2010	7	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0
A2-C 2ft	04/02/2010	2	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	1330	1330
A2-C 7ft	04/02/2010	7	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5
A2-D 2ft	04/01/2010	2	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	476	476
A2-D 7ft	04/01/2010	7	< 41.9	< 41.9	< 41.9	< 41.9	< 41.9	< 41.9	149	149
A2-E 2ft	04/01/2010	2	< 41.6	< 41.6	< 41.6	< 41.6	< 41.6	< 41.6	6380	6380
A2-E 7ft	04/01/2010	7	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1	< 49.1
A2-F 2ft	04/01/2010	2	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7	4210	4210
A2-F 7ft	04/01/2010	7	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
CAP-A2-10.5ft	04/02/2010	0.5	< 49.0	< 49.0	< 49.0	< 49.0	< 49.0	< 49.0	< 49.0	< 49.0
A3-A 2ft	04/02/2010	2	< 56.8	< 56.8	< 56.8	< 56.8	< 56.8	< 56.8	< 56.8	< 56.8
A3-A 7ft	04/02/2010	7	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	41	41
A3-B 2ft	04/02/2010	2	< 42.1	< 42.1	< 42.1	< 42.1	< 42.1	< 42.1	5730	5730
A3-B 7ft	04/02/2010	7	< 51.7	< 51.7	< 51.7	< 51.7	< 51.7	< 51.7	316	316
A3-C 2ft	04/02/2010	2	< 87.7	< 87.7	< 87.7	< 87.7	< 87.7	< 87.7	2630	2630
A3-C 7ft	04/02/2010	7	< 48.3	< 48.3	< 48.3	< 48.3	< 48.3	< 48.3	48.7	48.7
A3-D 3ft	04/02/2010	3	< 88.5	< 88.5	< 88.5	< 88.5	< 88.5	< 88.5	< 88.5	< 88.5
A3-D 8ft	04/02/2010	8	< 69.9	< 69.9	< 69.9	< 69.9	< 69.9	< 69.9	3330	3330
A3-E 2ft	04/02/2010	2	< 46.6	< 46.6	< 46.6	< 46.6	< 46.6	< 46.6	< 46.6	< 46.6
A3-E 7ft	04/02/2010	7	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9	< 43.9
CAP-A3-1 2ft	04/02/2010	2	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8
A4-A 2ft	04/02/2010	2	< 80.6	< 80.6	< 80.6	< 80.6	< 80.6	< 80.6	38	38
A4-A 7ft	04/02/2010	7	< 42.4	< 42.4	< 42.4	< 42.4	< 42.4	< 42.4	4500	4500
<b>Remediation Objectives ug/kg:</b>										
Soil Ingestion (residential)			---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)			---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)			---	---	---	---	---	---	---	---
Soil Inhalation (residential)			---	---	---	---	---	---	---	---
Soil Inhalation (commercial)			---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)			---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion			---	---	---	---	---	---	---	---

PCBs Polychlorinated biphenyls.

Remediation objective for this exposure pathway

has not been established by the IEPA.

Notes: 1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).

2. Remediation objectives from IAC Section 742.

3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW



Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Sample Depth	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
AI-1 9 ft	03/31/2010	9	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1
AI-B 2 ft	03/31/2010	2	< 46.2	< 46.2	< 46.2	< 46.2	< 46.2	< 46.2	< 46.2	< 46.2
AI-B 6 ft	03/31/2010	6	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1
AI-C Grate	03/31/2010		< 773	< 773	< 773	< 773	< 773	< 773	< 773	< 773
AI-C 2 ft	03/31/2010	2	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8
AI-C 7 ft	03/31/2010	7	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1
CAP-AI-1 ft	03/31/2010	1	< 46.3	< 46.3	< 46.3	< 46.3	< 46.3	< 46.3	< 46.3	< 46.3
CAP-AI-2 ft	03/31/2010	1	< 44.2	< 44.2	< 44.2	< 44.2	< 44.2	< 44.2	< 44.2	< 44.2
<b>Remediation Objectives ug/kg:</b>										
Soil Ingestion (residential)			---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)			---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)			---	---	---	---	---	---	---	1000
Soil Inhalation (residential)			---	---	---	---	---	---	---	---
Soil Inhalation (commercial)			---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)			---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion			---	---	---	---	---	---	---	---

PCBs Polychlorinated biphenyls.

--- Remediation objective for this exposure pathway has not been established by the IEPA.

Notes:

1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
2. Remediation objectives from IAC Section 742.
3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW

**Table 1**  
**Soil Sample Analytical Results - Polychlorinated Biphenyls**  
**Former ACF Facility East St. Louis, Illinois**  
**2010**

Sample Location	Sample Date	Sample Depth	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
A4-B 2 ft	04/05/2010	2	< 48.1	< 48.1	< 48.1	< 48.1	< 48.1	13900	< 401	13900
A4-B 7 ft	04/05/2010	7	< 42.5	< 42.5	< 42.5	< 42.5	< 42.5	< 42.5	560	560
A4-C 2 ft	04/05/2010	2	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3	< 44.3	310	310
A4-C 7 ft	04/05/2010	7	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8	< 44.8
A4-D 2 ft	04/05/2010	2	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0	< 46.0
A4-D 7 ft	04/05/2010	7	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0	< 48.0
TK 2 ft	04/05/2010	2	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	2390	2390
TK 7 ft	04/05/2010	7	< 90.1	< 90.1	< 90.1	< 90.1	< 90.1	< 90.1	< 90.1	< 90.1
A5-A 2 ft	04/05/2010	2	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	522	522
A5-A 7 ft	04/05/2010	7	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0	< 43.0
A5-A 7 ft Dup.	04/05/2010	7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7	< 42.7
A5-B 2 ft	04/05/2010	2	< 235	< 235	< 235	< 235	< 235	< 235	826	826
A5-B 7 ft	04/05/2010	7	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7	< 40.7
CAP-A5-12 ft	04/05/2010	2	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0	< 45.0	461	461
<b>Remediation Objectives ug/kg:</b>										
Soil Ingestion (residential)			---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)			---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)			---	---	---	---	---	---	---	1000
Soil Inhalation (residential)			---	---	---	---	---	---	---	---
Soil Inhalation (commercial)			---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)			---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion			---	---	---	---	---	---	---	---

**PCBs**

Polychlorinated biphenyls.

Remediation objective for this exposure pathway has not been established by the IEPA.

- Notes:
1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
  2. Remediation objectives from IAC Section 742.
  3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW

Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Sample Depth	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
1B/C 2 ft	04/29/2010	2	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	< 47.1	30	30
1B/C 7 ft	04/29/2010	7	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8
6E/7ES 2 ft	04/29/2010	2	< 44.9	< 44.9	< 44.9	< 44.9	< 44.9	< 44.9	< 44.9	< 44.9
6E/7ES 7 ft	04/29/2010	7	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4	< 44.4	124	124
7E/8ES 2 ft	04/29/2010	2	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	< 45.1	76.9	76.9
7E/8ES 7 ft	04/29/2010	7	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3
8E/9ES 2 ft	04/29/2010	2	< 41.8	< 41.8	< 41.8	< 41.8	< 41.8	< 41.8	48.5	48.5
8E/9ES 7 ft	04/29/2010	7	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	56.0	56
9E/10ES 2 ft	04/29/2010	2	< 44.7	< 44.7	< 44.7	< 44.7	< 44.7	< 44.7	64.1	64.1
9E/10ES 7 ft	04/29/2010	7	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	55.9	55.9
9E/10EN 2 ft	04/29/2010	2	< 46.9	< 46.9	< 46.9	< 46.9	< 46.9	< 46.9	< 46.9	< 46.9
9E/10EN 7 ft	04/29/2010	7	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	290	290
9CSE 2 ft	04/29/2010	2	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	< 46.8	12200	12200
9CSE 7 ft	04/29/2010	7	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	< 45.6	4750	4750
7B/8BS 2 ft	04/29/2010	2	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	< 43.5	318	318
7B/8BS 7 ft	04/29/2010	7	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3	< 45.3
<b>Remediation Objectives ug/kg:</b>										
Soil Ingestion (residential)			---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)			---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)			---	---	---	---	---	---	---	1000
Soil Inhalation (residential)			---	---	---	---	---	---	---	---
Soil Inhalation (commercial)			---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)			---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion			---	---	---	---	---	---	---	---

**PCBs Polychlorinated biphenyls.**

--- Remediation objective for this exposure pathway has not been established by the IEPA.

- Notes:
1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
  2. Remediation objectives from IAC Section 742.
  3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW



Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
8A-SE 2 ft	04/28/2010	< 138	< 138	< 138	< 138	< 138	< 138	246	246
8A-SE 7 ft	04/28/2010	< 59.7	< 59.7	< 59.7	< 59.7	< 59.7	< 59.7	< 59.7	< 59.7
5C-SW 2 ft	04/28/2010	< 71.0	< 71.0	< 71.0	< 71.0	< 71.0	< 71.0	44	44
5C-SW 7 ft	04/28/2010	< 74.2	< 74.2	< 74.2	< 74.2	< 74.2	< 74.2	114	114
5D-SW 2 ft	04/28/2010	< 71.9	< 71.9	< 71.9	< 71.9	37300	< 71.9	7350	44650
5D-SW 7 ft	04/28/2010	< 71.4	< 71.4	< 71.4	< 71.4	45700	< 71.4	82200	127900
H1-B 2 ft	04/28/2010	< 66.8	< 66.8	< 66.8	< 66.8	< 66.8	< 66.8	603	603
H1-B 7 ft	04/28/2010	< 133	< 133	< 133	< 133	< 133	< 133	< 133	< 133
H1-A 2 ft	04/28/2010	< 62.3	< 62.3	< 62.3	< 62.3	< 62.3	< 62.3	1950	1950
H1-A 7 ft	04/28/2010	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2	< 66.2
5DNE 2 ft	04/28/2010	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4	< 67.4	1310	1310
5DNE 7 ft	04/28/2010	< 66.4	< 66.4	< 66.4	< 66.4	< 66.4	< 66.4	1220	1220
6E SW 2 ft	04/28/2010	< 70.0	< 70.0	< 70.0	< 70.0	< 70.0	< 70.0	456	456
6E SW 7 ft	04/28/2010	< 68.3	< 68.3	< 68.3	< 68.3	< 68.3	< 68.3	1150	1150
6E7E N 2 ft	04/28/2010	< 70.5	< 70.5	< 70.5	< 70.5	< 70.5	< 70.5	211	211
6E7E N 7 ft	04/28/2010	< 71.3	< 71.3	< 71.3	< 71.3	< 71.3	< 71.3	373	373
<b>Remediation Objectives ug/kg:</b>									
Soil Ingestion (residential)		---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)		---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)		---	---	---	---	---	---	---	1000
Soil Inhalation (residential)		---	---	---	---	---	---	---	---
Soil Inhalation (commercial)		---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)		---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestion		---	---	---	---	---	---	---	---

PCBs Polychlorinated biphenyls.

Remediation objective for this exposure pathway has not been established by the IEPA.

Notes:

1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
2. Remediation objectives from IAC Section 742.
3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW

Table 1  
Soil Sample Analytical Results - Polychlorinated Biphenyls  
Former ACF Facility East St. Louis, Illinois  
2010

Sample Location	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
CAPA2-2.7 ft	05/13/2010	< 41.5	< 41.5	< 41.5	< 41.5	< 41.5	< 41.5	< 41.5	< 41.5
6E-SW 11 ft	05/13/2010	< 41.3	< 41.3	< 41.3	< 41.3	< 41.3	< 41.3	< 41.3	< 41.3
H1-A 11 ft	05/13/2010	< 48.2	< 48.2	< 48.2	< 48.2	< 48.2	< 48.2	< 48.2	< 48.2
<b>Remediation Objectives ug/kg:</b>									
Soil Ingestion (residential)		---	---	---	---	---	---	---	1000
Soil Ingestion (commercial)		---	---	---	---	---	---	---	1000
Soil Ingestion (construction worker)		---	---	---	---	---	---	---	1000
Soil Inhalation (residential)		---	---	---	---	---	---	---	---
Soil Inhalation (commercial)		---	---	---	---	---	---	---	---
Soil Inhalation (construction worker)		---	---	---	---	---	---	---	---
Soil Component to Groundwater Ingestic		---	---	---	---	---	---	---	---

PCBs Polychlorinated biphenyls.

--- Remediation objective for this exposure pathway has not been established by the IEPA.

**Notes:**

1. All concentrations and remediation objectives are in micrograms per kilogram (ug/kg).
2. Remediation objectives from IAC Section 742.
3. Samples analyzed by Teklab, Inc. of Collinsville, Illinois.

Exceeds Tier 1 Remediation Objective

sample collected from PCB hot spot area near 5D-SW



**Appendix A - Lab Data Sheets  
Self-Implementation Cleanup and  
Disposal Plan for the Former ACF  
Facility, East St. Louis, Illinois**

**September 9, 2011**

[REDACTED]

REUSE AND REMEDIATION BRANCH

ITEM: ACF Industries, East St. Louis, 761(a) PCB approval

INITIAL & DATE	ORC	INITIAL & DATE
STAFF: <u>Joe Kelly JCK 10/11/11</u>	STAFF COUNSEL:	_____
SECTION: <u>Corrective Action 1</u>	SECTION CHIEF:	_____
SECTION APA: <u>Josdra Martinez</u>	BRANCH CHIEF:	_____
SECTION CHIEF: <u>[Signature] 10/11/11</u>	REGIONAL COUNSEL:	_____
BRANCH APA: <u>[Signature] 10/11/11</u>	IF CONSULTATION HAS OCCURRED [ ]	_____
BRANCH CHIEF: <u>[Signature] 10/11/11</u>		
DIVISION APA: _____		
DIVISION DIRECTOR: _____		
OTHERS: _____		

DEPUTY REGIONAL ADMINISTRATOR: \_\_\_\_\_

REGIONAL ADMINISTRATOR: \_\_\_\_\_

RETURN TO: \_\_\_\_\_

PHONE#: \_\_\_\_\_

COMMENTS: Joe, Please sign the attached,  
in response to ACF's September 12  
submission. JCK